



Entry-Level 4 Channel Network Video Recorder

User's Manual v1.6.0



SVR-304 Basic



SVR-104 Basic

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System Requirements

The following are minimum system requirements for the system to operate Embedded Network Video Recorder (ENVR):

Operating System

Microsoft® Windows® 2000 Professional, Windows® XP Professional (32 bit) or Windows® Server 2003 (32 bit)

Browser

Microsoft Internet Explorer 6 or above

CPU

Minimum Intel® Pentium® 4 2.4 GHz or higher (Dual Core is recommended)

RAM

Minimum 1 GB of RAM, 2GB or above is recommended

Network

Minimum 10/100 Ethernet (Gigabit Ethernet is recommended)

Graphics Adapter

AGP or PCI-Express, minimum 1024×768, 16 bit colors.

(We highly recommend to work above the 1024 x 768 resolution to get the full experience of the software)

- ***Make sure your display DPI setting is set to default at 96DPI***
- ***To set DPI value, right-click on desktop, choose "Settings" tab >> "Advanced" >> "General"***

Contents Inside the Installation CD

- Adobe Acrobat Reader
- NVR Search Utility
- User's Manual
- Quick installation Guide
- Datasheet

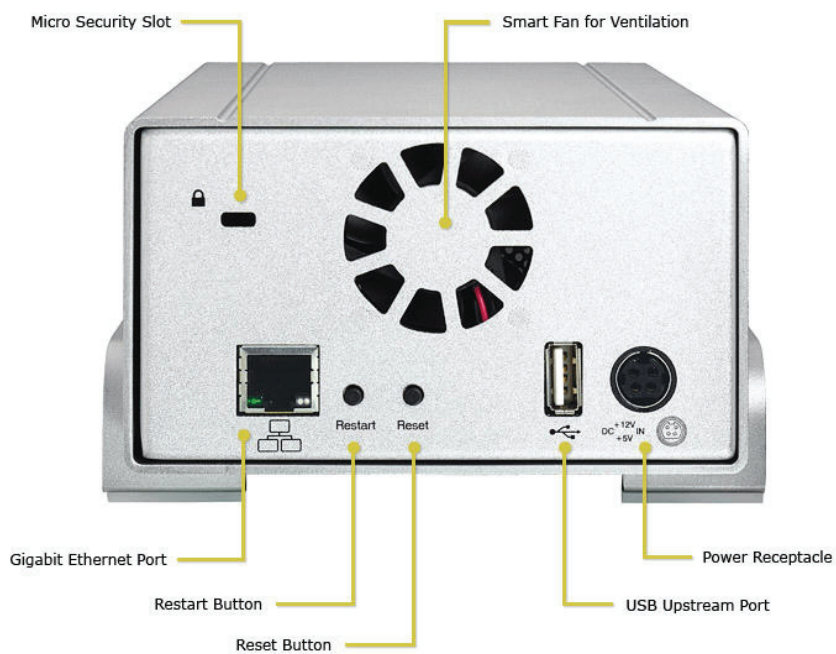
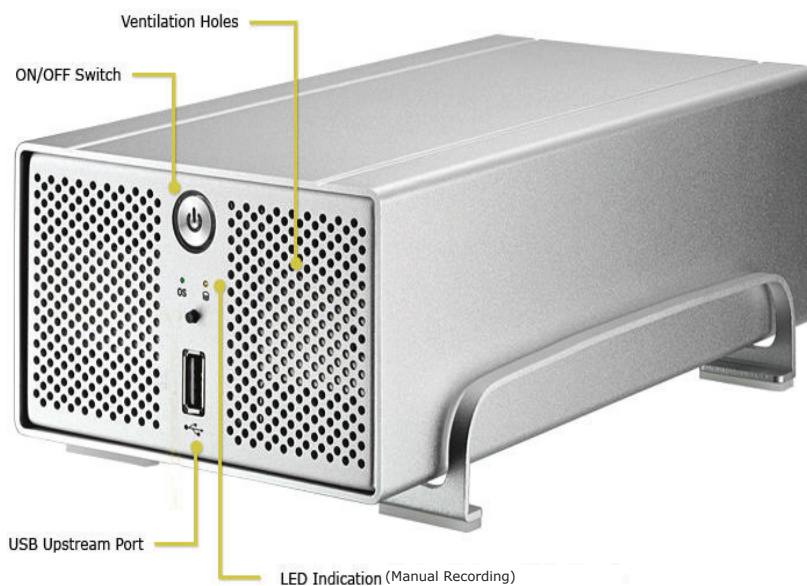
Product Description

The SEEnergy SVR-104/304 Basic are designed for use within a surveillance system, and performs recordings and playbacks pictures from network cameras in the system. It is designed for small scale applications such as retail store. Up to 4 cameras can be connected via a network and it is possible to record their camera pictures. It is possible to perform the settings or operate the NVR using a web browser installed on a PC connected to a network and live videos can be viewed on major mobile devices through its web browser. Recorded video can be played back from remote site by a PC. The NVR is compatible with most major brand cameras and its ability to automatically search and find the available cameras on the network can greatly reduce the user's effort when configuring the system.

- **Manage up to 4 Network Cameras**
- **Compatible with Major Brand Cameras**
- **High Quality Live/Playback Video**
- **Export Playback Videos to AVI**
 - **Two-way Audio**
 - **SEEnergy Smart Camera Search**
 - **Mobile Devices Remote Monitoring**
 - **Pure Web Based Administration**

Hardware Illustration

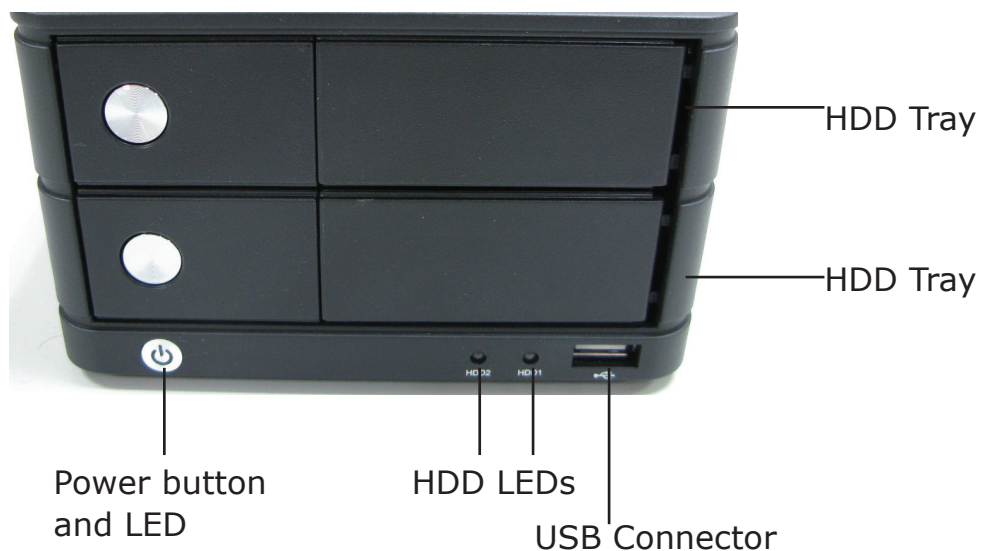
SVR-104 Basic



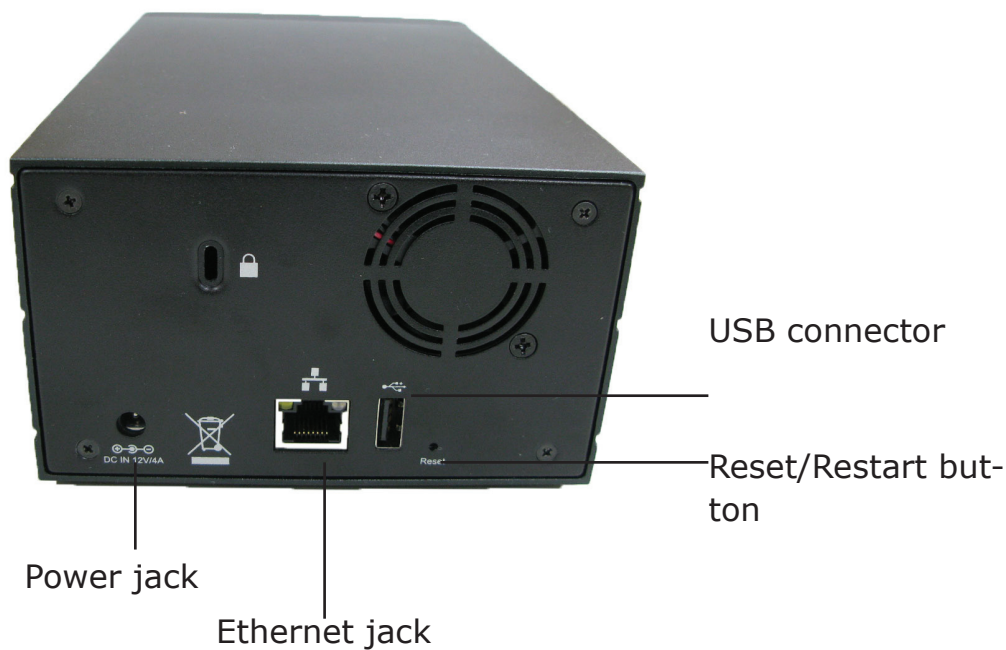
4 Channel (Basic) Network Video Recorder

SVR-304 Basic

(Front)



(Rear)



LEDs and Buttons

Power Button: (Blue when ON) Press to turn on/off the system

Front LEDs:

green	yellow
1. OS	2. HDD

OS LED

Solid green: System ready

Off: System Off

Blinking:

1. **System shutting down**

2. **Upgrading firmware**

a) **Through USB drive:** Blinking indicating the upgrade is in process. Once firmware upgrade completes, the LED goes off. Manually turn off the power and turn it back on would be required afterwards.

b) **Through the web UI:** Blinking indicating the upgrade is in process. Once firmware upgrade completes, the LED goes off. The NVR will then restart automatically. Once it finishes restarting, the LED should turn to solid green to indicate the system is now ready.

3. **Restoring previously saved configuration file**

a) **Through USB drive:** The LED should blink to indicate the process has started. The LED will then go off to indicate the process is complete. Manually turn off the power and turn it back on would be required afterwards.

b) **Through Web UI:** The LED should blink to indicate the process has started. The LED will then go off to indicate the restoring is complete and the system is restarting. The OS LED should indicate in solid green once the system becomes ready.

Recording LED

Solid amber: recording

Off: not recording

Blinking: Manual recording:

When "manual recording button" is pressed

* To start manual recording with the "manual recording button", press and hold the button for 2 seconds then release it. Follow the same procedure to stop.



Ethernet Port LED

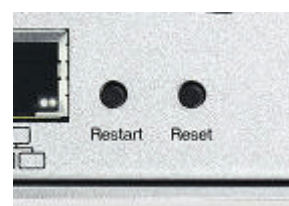
The green LED on the left indicates the link connection and the LED on the right indicates the speed

Speed	green	yellow	green	yellow
	10Mbps	1000Mbps	100Mbps	100Mbps



Restart Button

Press and release the button for hardware restart. The OS LED should go off during the restart to indicate the system is restarting. The LED should indicate in solid green once the system becomes ready.



Reset Button

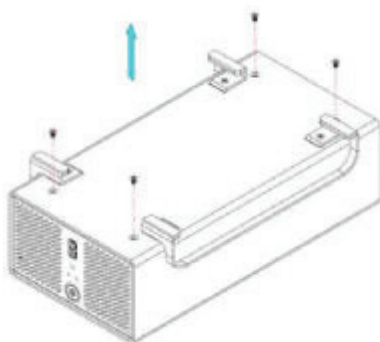
Press this button will restore the system's settings to factory default values. To start, press and hold the button for 5 seconds then release it once the OS LED goes off. The OS LED should indicate in solid green once the system becomes ready.



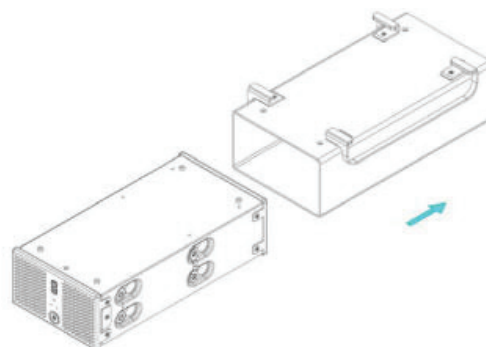
Hard Drive Installations

SVR-104 Basic

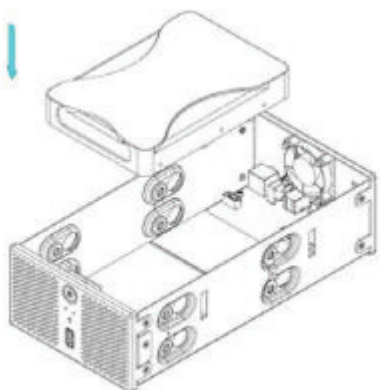
1. Remove the four screws from the bottom of the case.



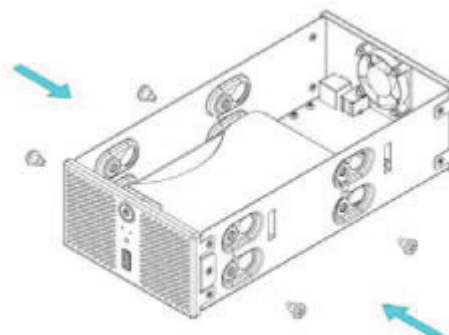
2. Push the inner enclosure out, and remove the outer chassis.



3. Install the first hard drive by placing it in the enclosure and connecting the SATA plus power cables.



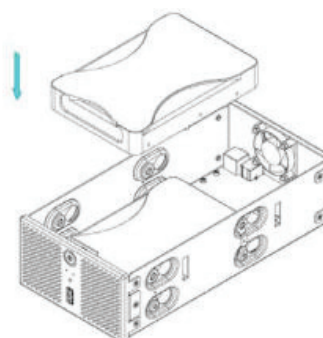
4. Mount the drive with two screws on each side.



5. Attach the thermal probe with the tape provided to the first hard drive.

Choose a location in between the two drives but without damaging the thermal probe when installing the second drive.

6. Install the second hard drive by placing it in the enclosure and connecting the SATA plus power cables.



SVR-304 Basic

1. Push the silver button to release the HDD tray



2. Pull out the HDD tray



3. Place the HDD on the tray and secure the HDD with the screws at the bottom (as illustrated)



4. Push the tray back in the unit and press down the black bar to secure the tray



Connect to the NVR

There are various ways you can connect to the NVR and below are the suggested methods for different network setup:

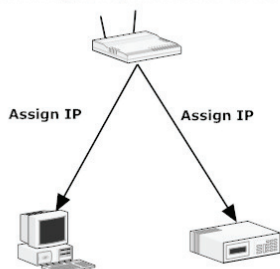
- The NVR is placed in a network with a DHCP server: Connect to the NVR by using **"NVR Search" Utility**
- The NVR is placed in a network without DHCP server (or you are connecting to it directly): **Access NVR with its default IP**

Use NVR Search Utility

If the NVR is placed in a corporate network or a local area network where a DHCP server is already presented, run the "NVR Device Search" utility from a computer that is on the same network (within the same subnet) and locate the NVR with its IP address that is assigned by the top-level DHCP server.

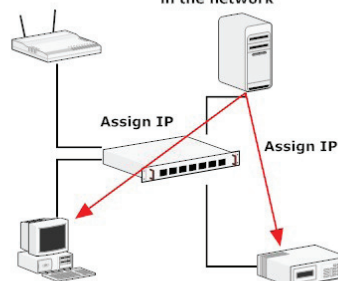
1.

Network gateway as the DHCP server

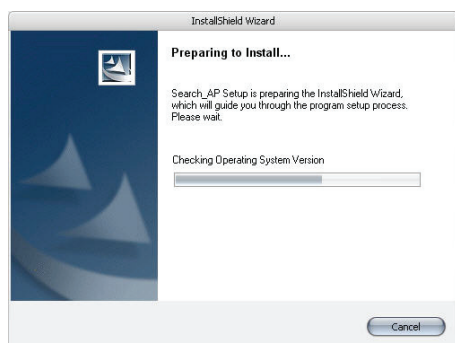


2.

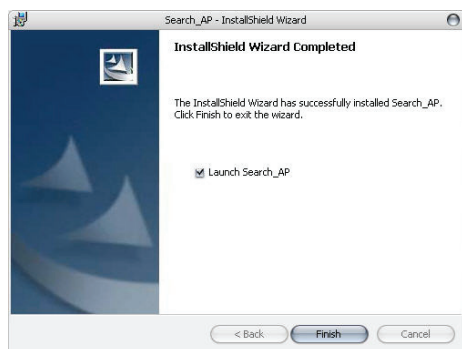
A separate DHCP server in the network



To begin, launch the "NVR Search" utility from the CD and proceed with the installation:



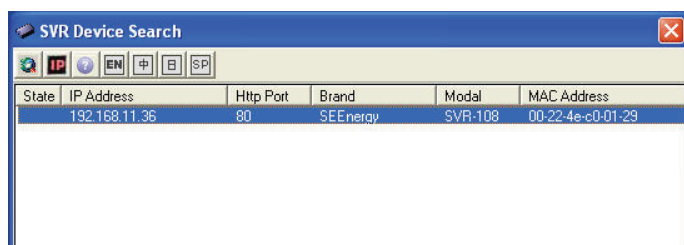
Once the installation is complete, check the "Launch the Search AP" option and click "Finish":



The search should start automatically and its status should be displayed:



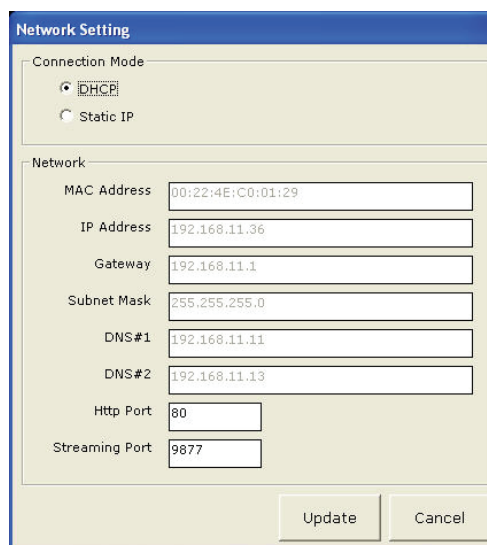
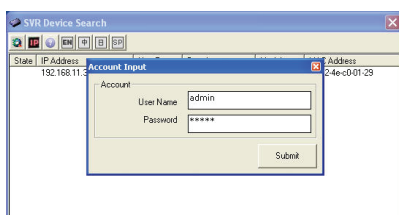
The NVR should be located and its IP address should be displayed: Double-click on it and the program should automatically access the NVR's web administration page from your default browser



You may change NVR's IP address by click on the button highlighted below.



You will be prompted for the NVR's login information before proceeding to change device's IP address.



You may click on the button highlighted below to perform search again. Or double-click on any of the search results to access NVR's web administration page



perform search again

access NVR's web administration page

You should be prompted for the NVR's username and password. Enter its default username "**admin**" and password "**admin**" and then click "OK" to enter the system



* The built-in DHCP server is intended to ease the installation between the NVR and the IP cameras. In the event there's no DHCP server (router) presented in the network, the NVR can act as DHCP server and assign IP to cameras.

However, if such configuration method is chosen, it's strongly suggested that the NVR is fully started first as startup time is different among different network devices.

Due to the reason that the IP cameras tend to finish booting up faster than the NVR, if the NVR is not fully started before IP cameras do, there is a very great chance that the cameras will not properly obtain IPs from the NVR.

In the event that users wish to setup everything on the network with static IP addresses, the built-in DHCP server function can be manually turned off under "Setup" >> "System Configuration" >> "Network Setup" and check off the DHCP server function.

NVR Setup

System Configuration

Network Setup

Time and Date

Users Account

Group Privilege

Disk Setup

Channel Configuration

Event Configuration

Recording Configuration

System Options

Network Setting

Connection Type: Static IP

IP Address: 192 . 168 . 11 . 16

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 11 . 2

DNS 1: 192 . 168 . 11 . 11

DNS 2: 168 . 95 . 92 . 1

HTTP Port: 80

Streaming Port: 10828

UPnP Port Forwarding: ☐ External Port: 6000

Please enter at least one valid DNS :
plan to use services (such as NTP se
domain names

Optional Setting

Device Name:

DHCP Server

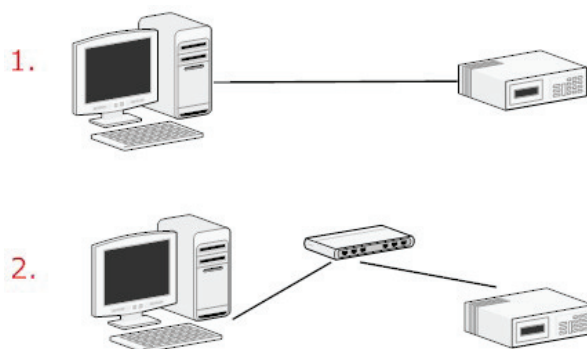
DHCP Server: ☒ ON ☐ OFF

DHCP Server Status: OFF

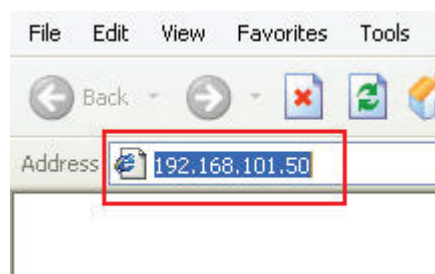
Max. DHCP Client: 30 (Max. 30 clients)

Access NVR with its default IP address

The NVR comes with a pre-configured static IP "**192.168.101.50**". However, it is only used when there is no DHCP server presented in the network. The NVR will turn on its DHCP server function and act as the DHCP server in the network. To connect to the NVR, use a PC that is on the same network over a switch or hub, or connect the PC directly to the NVR using a crossover CAT5 Ethernet cable.



The PC that is connected directly to the NVR (or within the same local area network) should receive an IP from it. Simply access the NVR from your web browser with its IP address

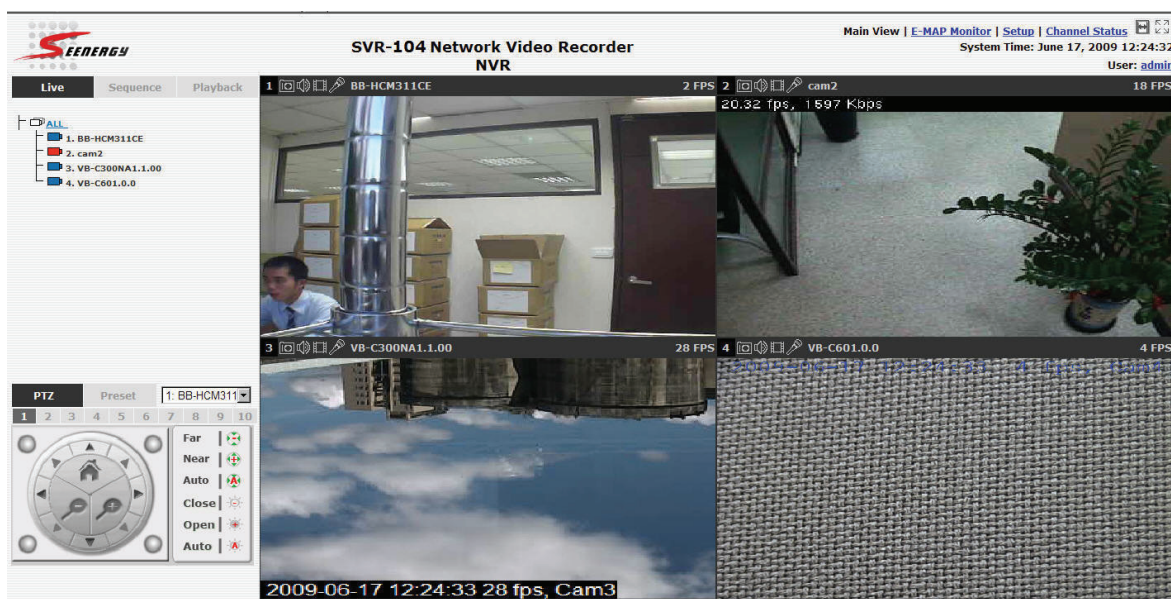


Again, you should be prompted for the username and password. Enter its default username "**admin**" and password "**admin**" and then click "OK" to enter the system



4 Channel (Basic) Network Video Recorder

1. Live View



The "Live View" page provides the following functions:

- Retrieve camera's video stream
- Retrieve camera's status
- Perform Live Sequence Viewing
- PTZ Control
- Perform PTZ Preset Sequence viewing
- Perform manual recording
- Take snapshot
- Receive audio of a video stream
- Send audio
- Change web UI display language

1.1 Retrieve camera's video stream




The camera list is expanded and displayed on the Live View page.


- Click "All" to display videos in the quad-video mode
- Click on any camera to display video in single-view mode

1.2 Retrieve camera's status

The camera list can show each camera's current status. Each status is represented with different colors and their meanings are explained on the left

 Camera is connected

 Camera is NOT connected

 Camera is current performing recording

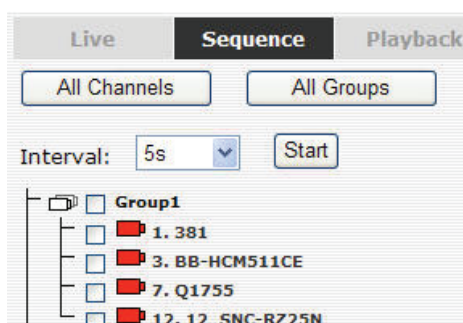
1.3 Perform Sequence Viewing

Sequence view is a function that allows you to view multiple video streams from certain cameras in sequence automatically without having to select them one by one.

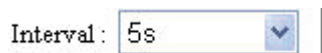
To perform sequence view, select "SEQ View" from the upper-left hand corner



Next, select one or more camera(s) or camera group(s) for sequence viewing



Then select dwell interval from the drop-down menu



Finally click "Start" to start sequence viewing

** Click "All Channels" to quickly select all available channels and start sequence view in single-view mode.*

1.4 PTZ Control

PTZ control provides functions to pan, tilt, zoom a PTZ camera as well as the ability to adjust camera focus and iris



Camera(s) that are currently being selected for live viewing will be listed in the PTZ drop-down menu. Simply select a camera then use the PTZ control panel to control the camera



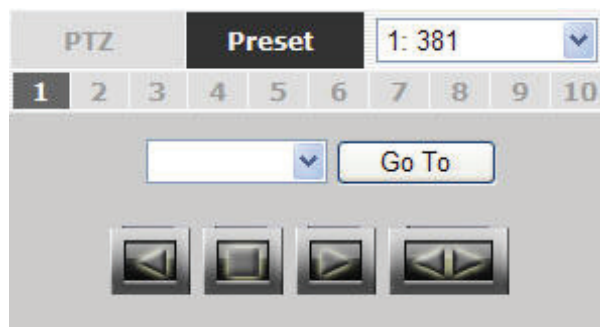
The bar shown below allows you to control the pan/tilt speed



1.5 Perform PTZ Preset Viewing

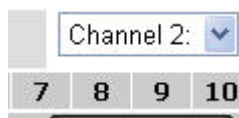
There are three functions provided in the "Preset" section:

- Perform preset point viewing of a particular camera
- Auto pan a particular camera
- Perform preset point sequence viewing

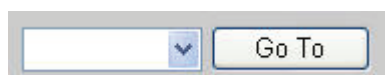


Preset Point Viewing

Start by selecting a PTZ camera from the drop-down list:



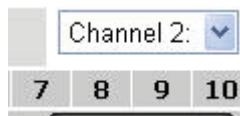
Its available PTZ preset points will be listed in the drop-down list shown below:



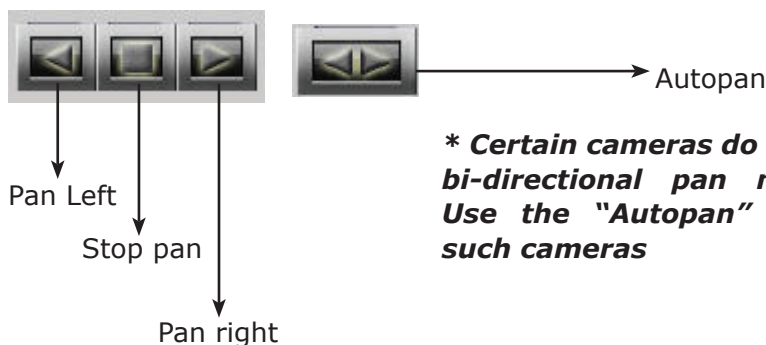
Select a preset position from the drop-down list and click "Go to" to move the live view to that position

Auto Pan Viewing

Start by selecting a PTZ camera from the drop-down list:

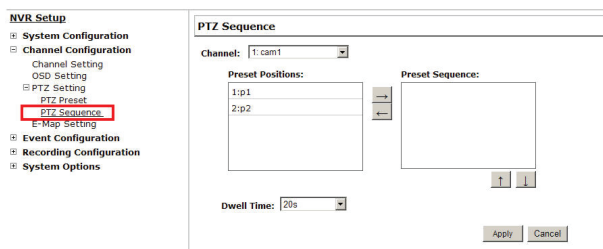


Use the Auto Pan control buttons to pan right, left and stop auto pan



Preset Point Sequence Viewing

This function allows you to view multiple preset points from a video of a camera without having to select them one by one. Once you have defined the preferred preset points in "**Channel Configurations**" >> "**PTZ Setting**" >> "**PTZ Sequence**" under the "**Setup**" menu, click "Start" in the lower-left hand corner in Live View under "Preset" and the recorder will begin to display videos from those preset points in sequence automatically until you click "Stop"



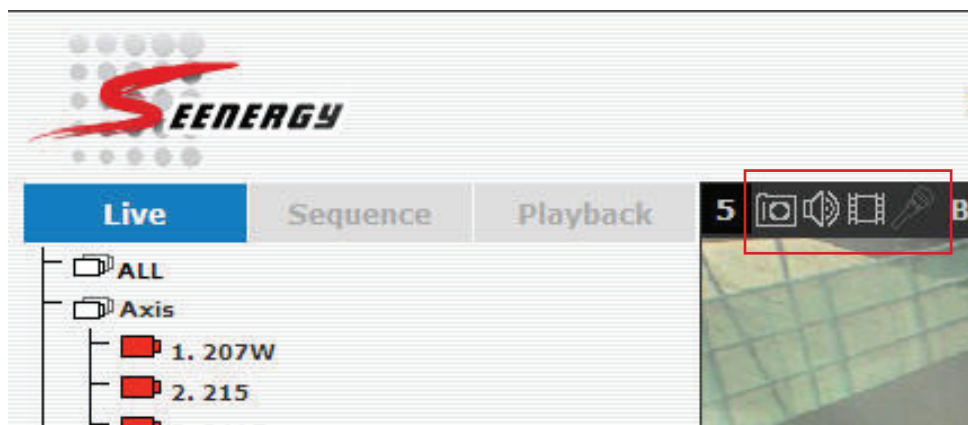
"In the Setup page"







In the Live View



1.6 Live Video Control Buttons

Each live video window comes with control buttons with functions described below:




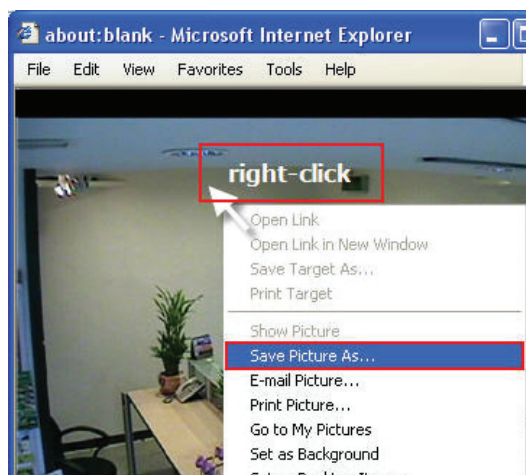
-  Take a snapshot of a live video
-  Turn on/off audio of a live video
-  Start/stop recording of a live video (manual recording)
-  Audio post function



-  Full screen view of a live video
-  Display video in its original ratio

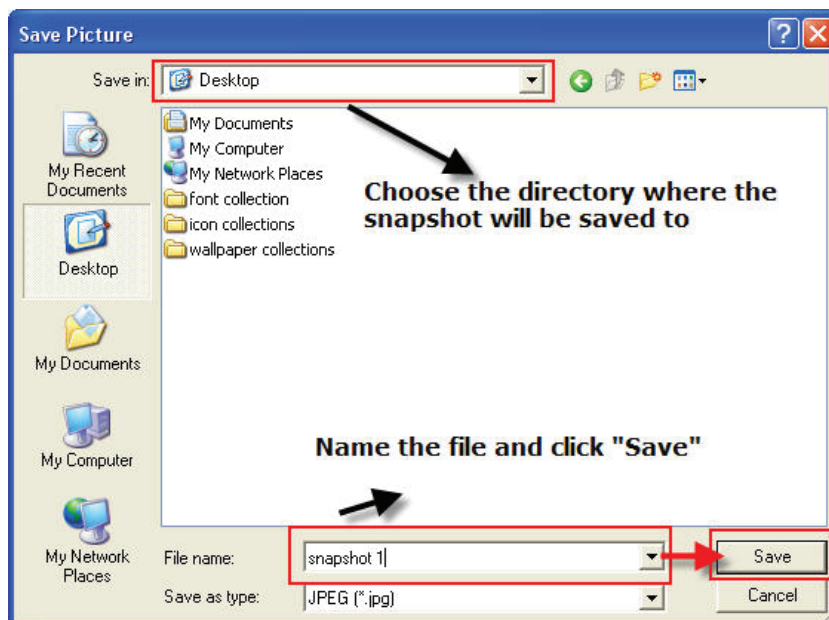
Take a snapshot of a live video

To take a snapshot of a live video, click the  button and the snapshot of the video will be displayed in a pop up window shown like below




Right-click anywhere on the image and select "Save Image as" from the pull-down menu


In the pop up dialog, name the image file and choose which directory the image will be saved to and click "Save"




Full Screen View of a Live Video


To view a video in full screen, click the  button. To exit full screen video, double-click anywhere on the video.


Turn On/Off Audio of a Live Video

You can retrieve audio from a particular camera. Simply click the  button to do so.

The button will show in different color once the audio is turned on.  Click on it again to turn off audio.

Start/Stop Recording of a Live Video

You can manually start or stop recording of a live video by using the  button.

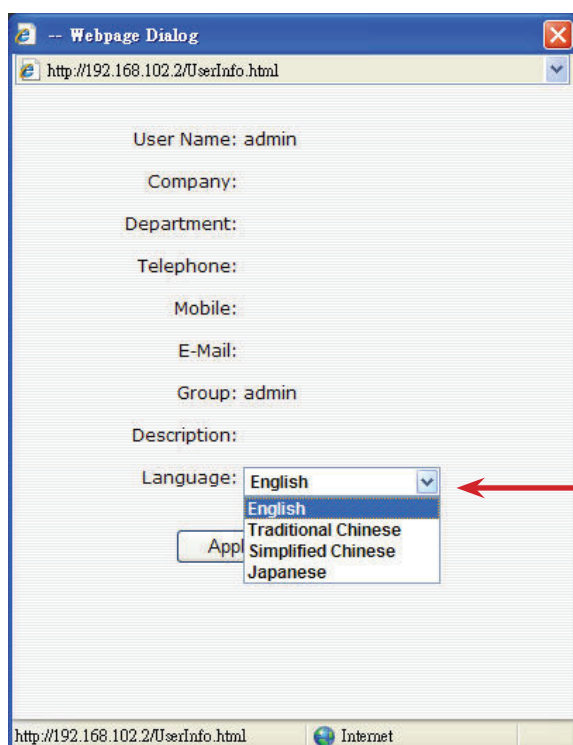
The button will show in different color once the recording is started manually.  Click on it again to stop recording.

Audio post

This function allows user to speak from a PC through a microphone and the audio can be played at the camera side if it has a speaker connected to it.

1.7 Change Web UI Display Language

You can change the web UI display language from the current login username link located at the upper-right hand corner. Click on the link opens up a new window which displays detail information about the user as well as a drop-down menu which lets you change the display language.

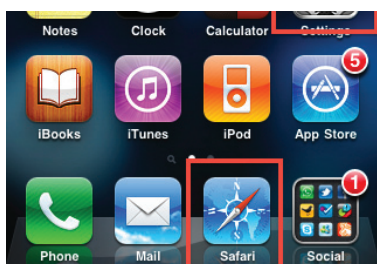


1.8 Live View through iPhone

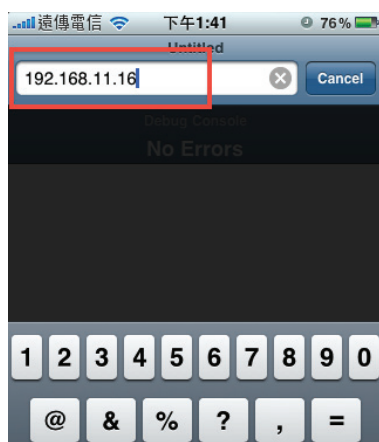
You can use iPhone and perform single channel live view to the NVR by using its Safari browser. To be able to view the live video through the Safari browser, make sure "javascript" is on under "Settings" >> "Safari" >> "Javascript"



Once Javascript is enabled, click the "Home" button on the iPhone to go back to the home screen and open the Safari browser



Type in the IP address of the NVR in the address bar



4 Channel (Basic) Network Video Recorder

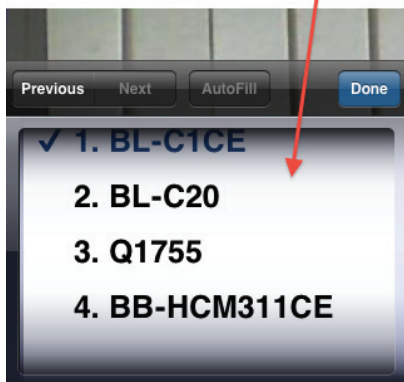
You should be prompted to enter the username and password to access the NVR



Upon successful login, you should see the live view video of the first channel



Click on the "Channe" drop-down menu to select other cameras



4 Channel (Basic) Network Video Recorder

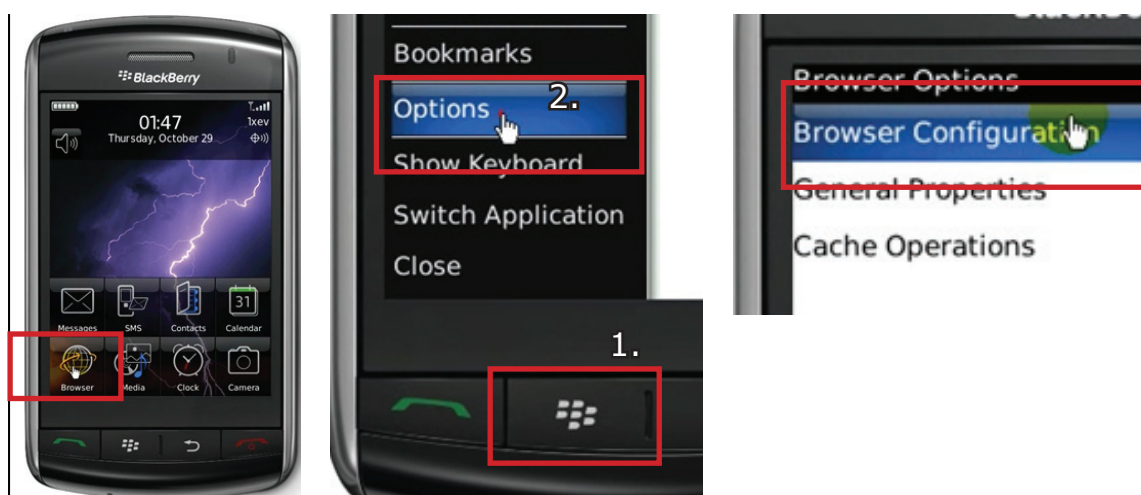
If a PTZ camera is selected, the corresponding control buttons will display (control PT only)



** Please note that this function is camera dependent and is not available to all cameras. Certain cameras do not allow adjusting image size and the selection "Auto" will be used.*

1.9 Live View through Blackberry Phones

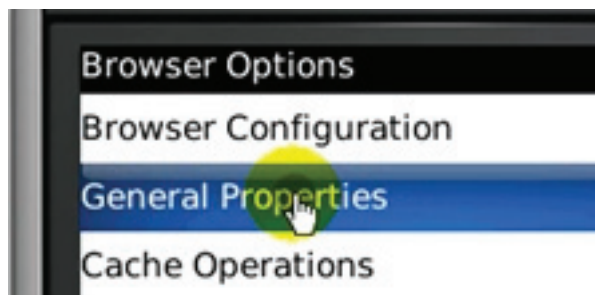
You can use Blackberry and perform single channel live view to the NVR by using its Safari browser. To be able to view the live video through its browser, make sure "javascript" is enabled under "Browser" >> "Menu button" >> "Options" >> "Browser Configuration"



Enable the "Support Javascript" option and click the menu button and click "Save Options"

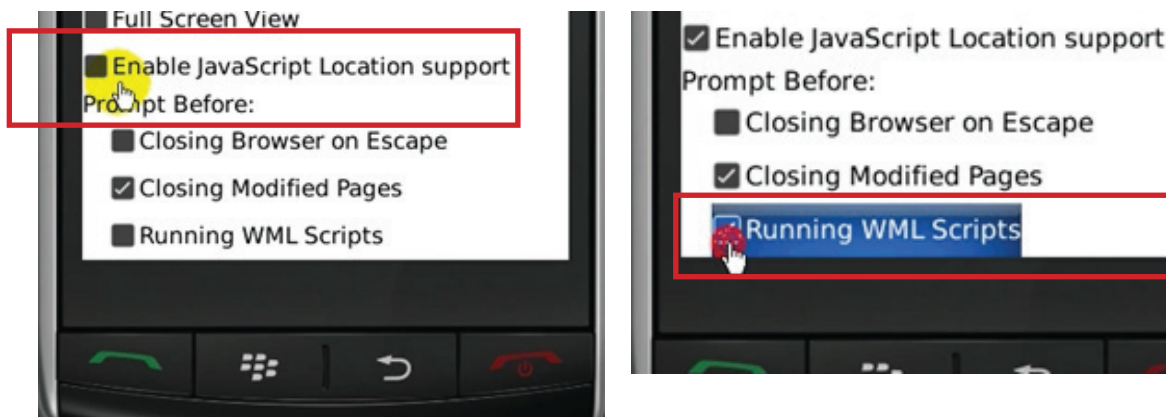


Go to "General Properties"



4 Channel (Basic) Network Video Recorder

Make sure two options illustrated below are enabled



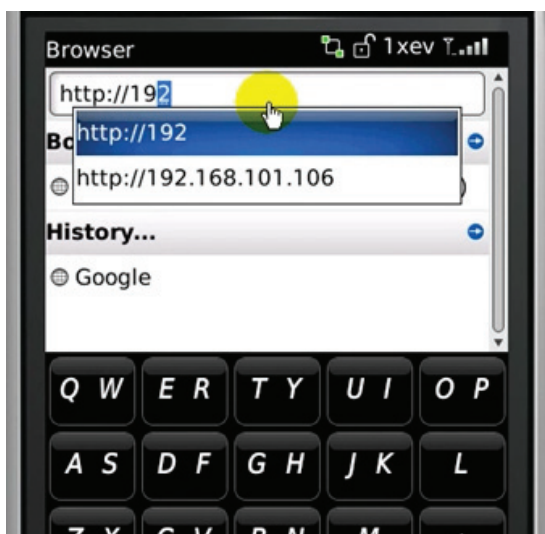
Press the menu button and click the "Save Options" to save settings



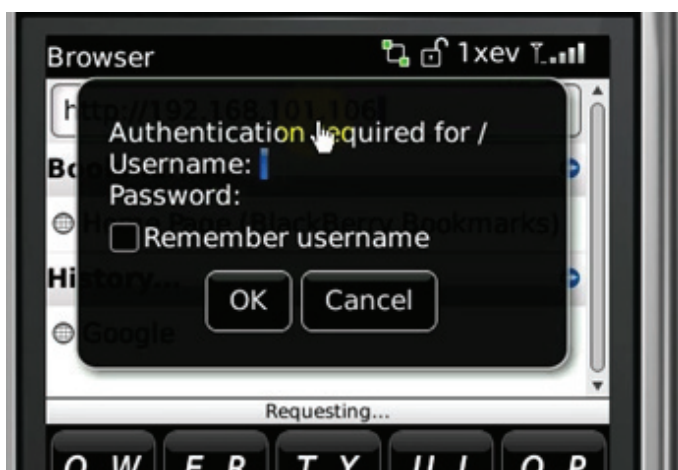
Press the button highlighted below to go back to the browser



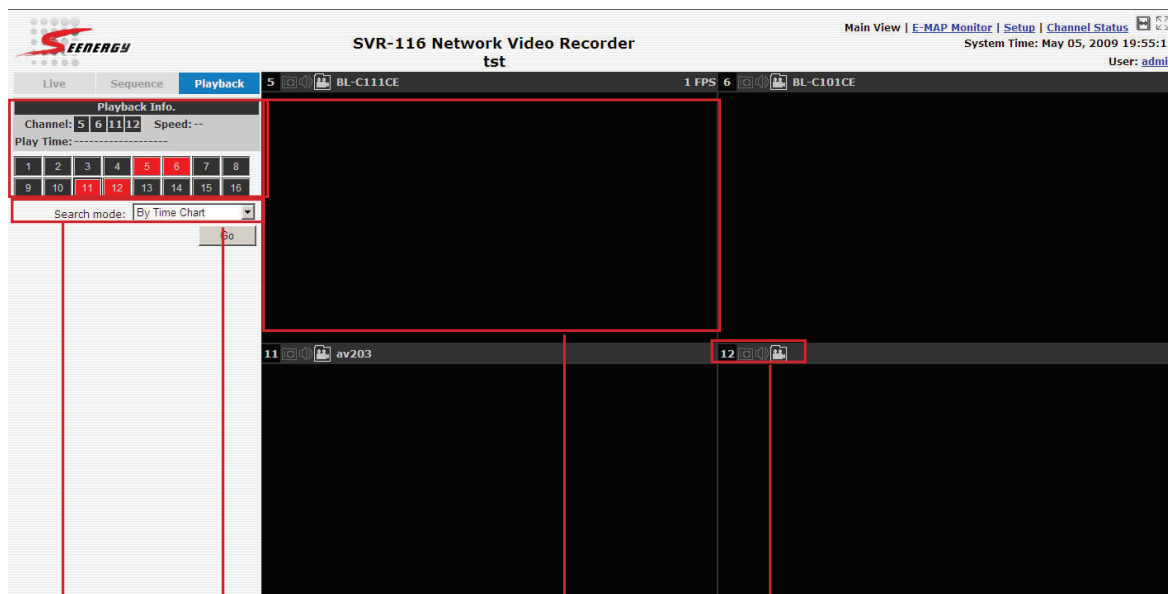
Type in the IP address of the NVR in the address bar



You should be prompted to enter its username and password for access



2. Playback



Methods to search playback

Playback video control buttons

Channels to be played back

Playback video

Playback is a function that allows you to play one or more videos that were previously recorded by a chosen recording method or due to an event trigger. The NVR offers synchronized playback from up to 4 channels and various types of search methods are provided to help you find the footage you need quickly.

You can turn on or off the audio of a recorded video at your choice if audio was also recorded during the recording of the video.

Playback video can be viewed in full screen and snapshots can be taken and saved during a video playback.

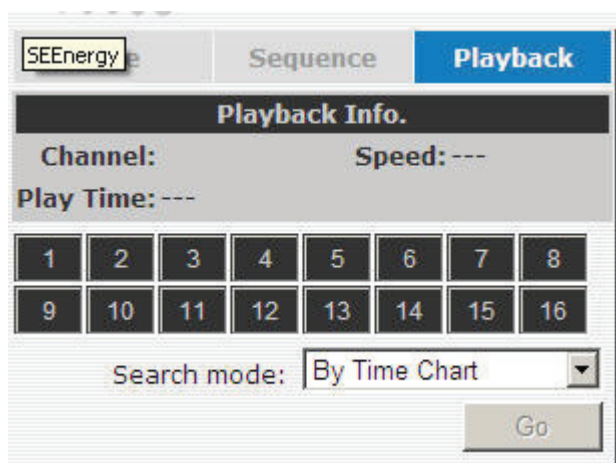
2.1 Methods to Search Playback Videos

The NVR offers three methods to quickly help users find videos that were previously recorded:

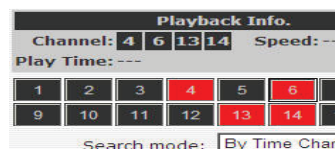
- Search by time: *Specify a time range and search videos recorded within that range*
- Search by event: *Find videos that were recorded due to event triggers*
- Play by start time: *Enter a specific time a video was recorded to start playing back the video*

Search by time chart

- Start by selecting which channel(s) you would like to perform a search on:



* Selected channels will be marked in red



- Select "Search by time chart" from the "Search Method" drop-down list and click "Go" to start the search:



- Results will then be displayed in a “Date/Channel” table and boxes marked in blue represent videos found in those dates:

Date:	CH1	CH2	CH3	CH4
				1
				2
				3
				4
				5
				6
				7
				8
				9
				10
				11
				12
				13
				14
				15
				16
				17
				18
				19
				20
				21
				22
				23
				24
				25
				26
				27
				28
				29
				30
				31

- Click on any blue cell box should direct you to the hour/channel table if there were multiple videos recorded during that date:

CH1	CH2	CH3	CH4	
				1
				2
				3
				4
				5
				6
				7
				8
				9
				10
				11
				12
				13
				14
				15
				16
				17
				18
				19
				20
				21
				22
				23
				24

* Videos from other cameras that are recorded on the same date will also be displayed

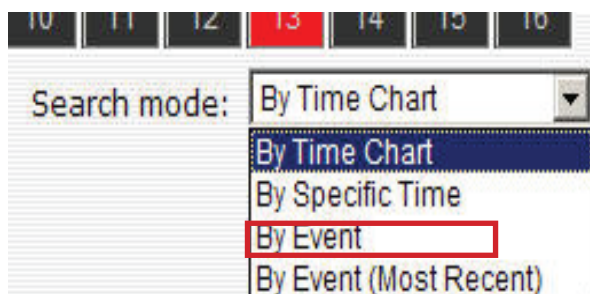
- Click on the cell box again will start playing back the videos if you have reached the end of search results:



- Videos found from other cameras that were recorded at the same time will also be played.

Search by event

- Start by selecting which channel(s) you would like to perform a search on:



* Selected channels will be marked in red

Live		Sequence		Playback			
Playback Info.							
Channel: 3 5 6 13				Speed: ---			
Play Time:---							
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

- Select "Search by event" from the "Search Method" drop-down list and click "Go" to start the search:
- Results will then be listed like what is shown below (displays the oldest record top down). Click on a particular result to start the playback:



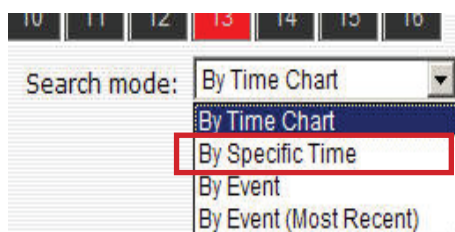
* You can click "Next Search" to display the next 15 results.

- You may also specify a new start time to search and display results from then on. You can restrict the number of results to be displayed at once (max. 30) and perform the search again

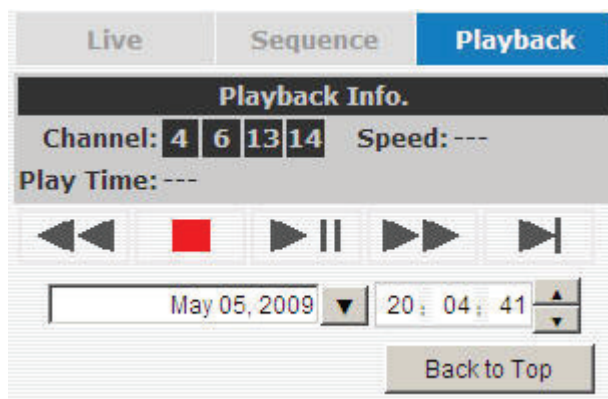


Play by specific time

If you know when a recording was taken place, you may choose the "Play by start time" from the "Search Method" drop-down list



Then you will be prompted to enter a specific time and date for the recorded video.



Use the  button to select month, date, and year

Search by event (Most Recent)

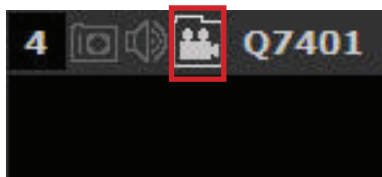
This function quickly displays the most recent event recordings from the selected channels, displaying the most recent result top down. You may click "Update" to update the list to display the most recent result



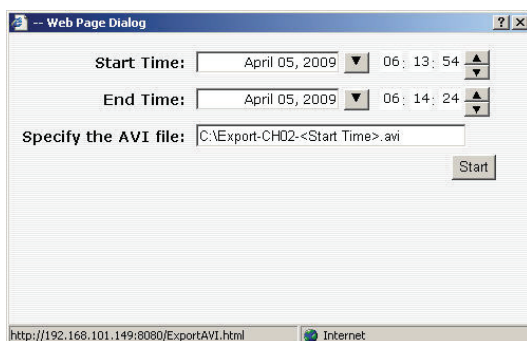
2.2 Export Playback Videos to AVI Files


User can export the recorded playback videos stored on the NVR to a local computer and save them in AVI file format. The files can then be played on the PC by a 3rd party media player such as VLC player or Windows Media player.

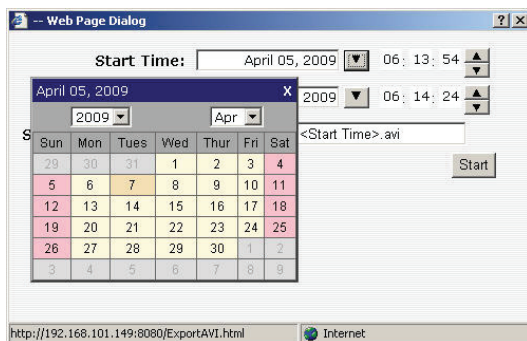
Once you locate the recorded videos with steps described in the previous section, hit the "Export AVI" button on a video window of the video you wish to export.



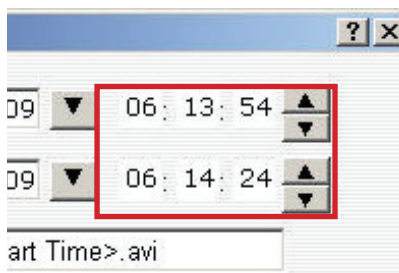
A new dialog will pop up and allows you to specify the time frame (or length) of the video you wish to export



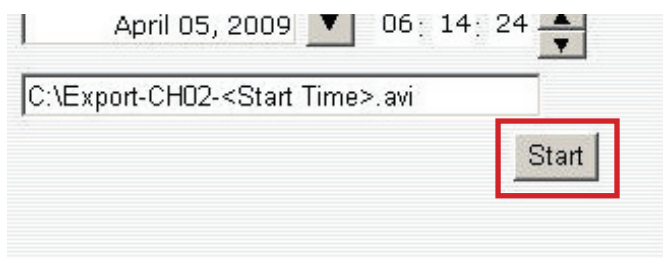
Click the  button to pull down the calendar to help you specify the month, date and the year



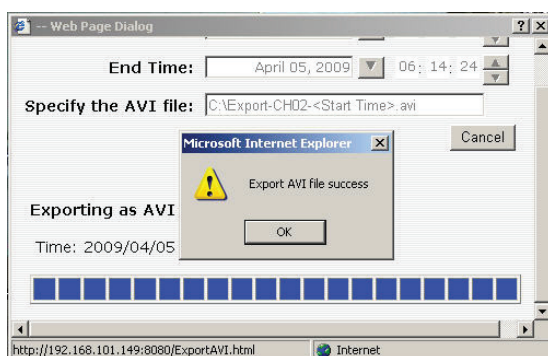
Specify the starting and ending hours of the video by entering numbers in the text boxes



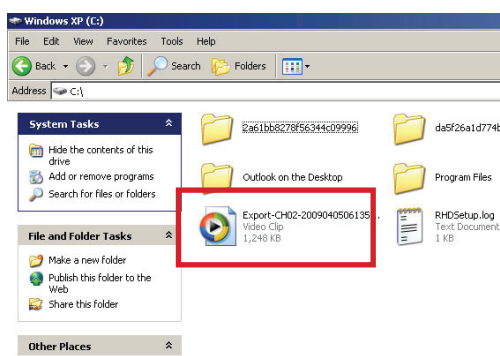
Hit the "Start" button to start exporting. The file will be automatically named and saved under the C:\ partition



You will be notified once the process is completed successfully



The exported AVI file will be saved under the C partition

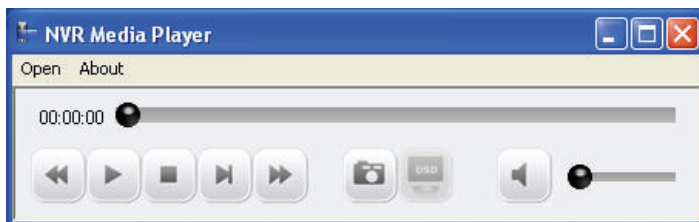


* *ffdshow* is required in order to play the exported AVI file with Windows Media Player. You can get it at "<http://sourceforge.net/projects/ffdshow-tryout/>" to download the "*ffdshow_beta6_rev2527_20081219.exe*"

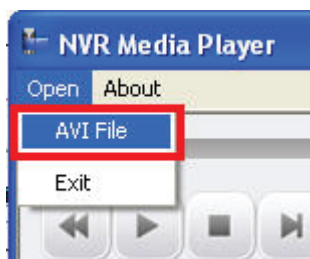
2.3 Play Export Playback Videos with NVR Media Player

You can also use the SEEnergy NVR Media Player that is available on the CD to play the exported AVI files. This can save you the trouble of installing third-party media player or codecs when playing the exported AVI videos.

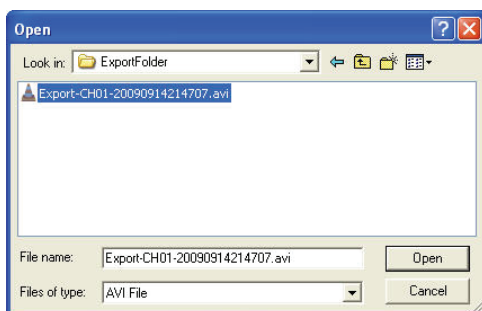
Run the NVR Media Player on the CD:



Click "Open" >> "AVI File"

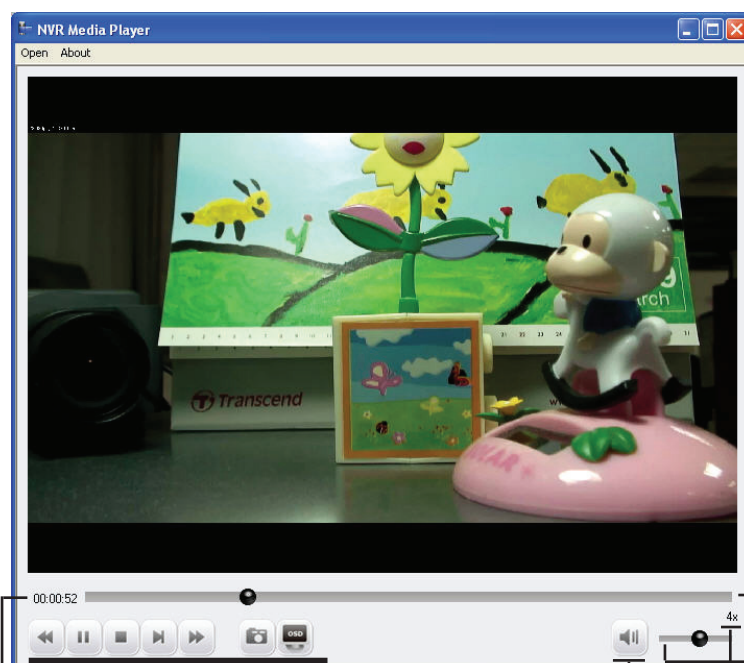


Locate the exported AVI file, and click "open". (normally under "C:\ExportFolder")



The video will then start playing



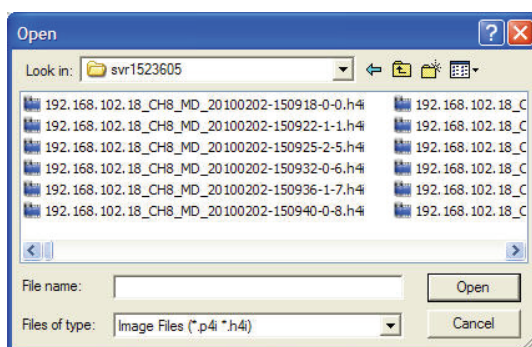
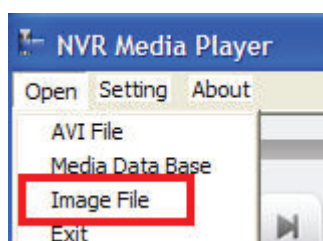


- video play control bar
- video play control buttons:
Rewind/Pause (Play)/Stop/Next Frame/Fast Forward/
Screenshot/Display OSD
- video play time
- Volume Control
- Audio Control (click to enable/disable)
- Video Play Speed

2.4 Open Event Snapshot images with NVR Media Player

The NVR sends snapshots that are taken when an event occurs to a destined FTP server or mail recipient. These type of snapshot images are saved in a proprietary image file format, h4i or p4i, and can only be opened by the NVR media player.

To do so, Select "Open" from the top menu then select "Image File". A new dialog should be displayed which lets you locate the image file.



3. System Setup

3.1 System Configurations

The "System Configurations" page provides users options to setup the device quickly and properly. After properly configuring all settings in all the sub-pages, users should expect a fully working network video recorder that is ready to manage cameras on the network. We will start by configuring its network settings to make sure it works correctly in your network. Next, we will help you adjust the system time so videos will be recorder with correct timestamp. To better secure the system for unwanted disturbance, we will guide you on setting up user's account and privileges to prevent settings gets altered by users other than the system administrator. Lastly, we will tell you what you should expect after installing a hard disk and how to prepare the hard disk for the video recording.

3.1.1 Network Settings

SVR-116 Network Video Recorder
tst

Setup

- System Configuration
 - Network Setup
 - Time and Date
 - Users Account
 - Group Privilege
 - Disk Setup
- Channel Configuration
- Event Configuration
- Recording Configuration
- System Options

Network Setting

Connection Type:

IP Address: 192.168.102.2

Subnet Mask: 255.255.252.0

Gateway: 192.168.101.1

DNS1: 192.168.11.11

DNS2: 192.168.11.13

HTTP Port:

Streaming Port:

UPnP Port Forwarding: ☐ External Port:

Optional Setting


Device Name:

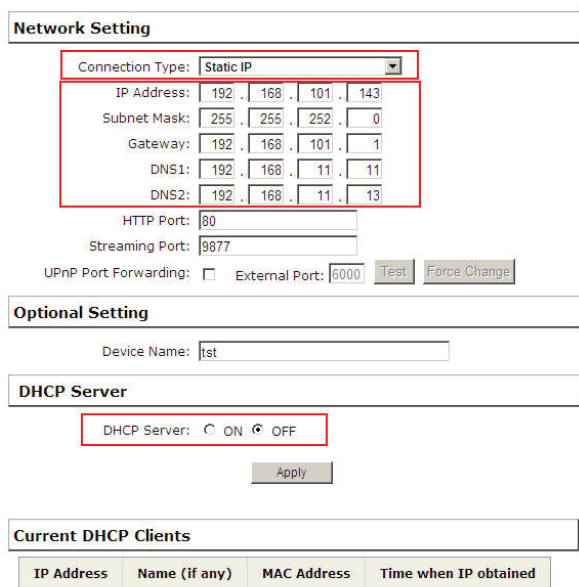
You need to adjust settings in this page for the device to work properly in your network. It is critical that settings here are configured correctly based on your network configurations so that the recorder can be administered through the local area network and cameras can be connected from it.

4 Channel (Basic) Network Video Recorder

By default, the recorder is set to obtain IP address from DHCP server, it should be sufficient in most network environments, and most likely you should not need to alter anything in this page. To locate the recorder, simply use the SEEnergy IP Utility with steps described in page 12.

If you wish to set the recorder to use a static IP address in your local area network,

1. Choose "Static IP" from the "Connection Type" drop-down menu
2. Enter the IP address, subnet mask, default gateway address and DNS server address for the recorder
3. Enable "DHCP Server" under "DHCP Server" if you wish to use the recorder as a DHCP server, or leave it disabled if there is already a DHCP server in the network 
4. Click Apply for the settings to take effect



Network Setting

Connection Type: **Static IP**

IP Address: 192 . 168 . 101 . 143
 Subnet Mask: 255 . 255 . 252 . 0
 Gateway: 192 . 168 . 101 . 1
 DNS1: 192 . 168 . 11 . 11
 DNS2: 192 . 168 . 11 . 13

HTTP Port: 80
 Streaming Port: 9877

UPnP Port Forwarding: ☐ External Port: 6000

Optional Setting

Device Name: tst

DHCP Server

DHCP Server: ☐ ON ☒ OFF

Current DHCP Clients

IP Address	Name (if any)	MAC Address	Time when IP obtained
------------	---------------	-------------	-----------------------



The recorder can detect the presence of a DHCP server upon startup. It sets itself to use static IP address if there is no DHCP server currently presented in the network. Its DHCP server function is also turned on at the same time to assign IP addresses to cameras that are later connected to the network

You can manually turn off the DHCP server function if you wish to use a separate DHCP server



Change the recorder's IP address would require the recorder to restart. Restart the device under "system Options" >> "Maintenance" for the settings to take effect.

3.1.1.2 DDNS Service

DDNS, which stands for "Dynamic DNS", is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system (in this case, the NVR) using the Internet Protocol Suite, to notify a domain name server to change, in real time, the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.

A popular application of dynamic DNS is to provide a residential user's Internet gateway that has a variable, often changing, IP address with a well known hostname resolvable through standard DNS queries.

This is useful if the NVR is placed on the Internet with a dynamic public IP, which once the DDNS is properly setup, users can access the NVR remotely with the DDNS domain name without worrying if the IP has changed or not.

NVR Setup

- [-] System Configuration
 - Network Setup
 - DDNS Service
 - Time and Date
 - Users Account
 - Group Privilege
 - Disk Setup
- [+] Channel Configuration
- [+] Event Configuration
- [+] Recording Configuration
- [+] System Options

Dynamic DNS Service

☐ Enable DDNS Service

Server Address: www.DynDNS.com (Free) ▼

Domain Name:

User ID:

Password:

Connection Status: Disconnected

Check DDNS Status

Apply



Please make sure a valid DNS server has been configured under the "Network Setting" page in order for this function to work properly.



The NVR currently only works with free DDNS service provided by "DynDNS". For more information, please go to www.dyndns.com



*If the NVR is placed behind a router or Internet gateway, please make sure port forwarding for port 80 is configured on the router or the gateway in order for the DDNS function to properly register with the service. **It's often suggested to use the DDNS function in the router/gateway for such case instead.***



Once you have the DDNS function successfully up and running, please DO NOT forget to configure port forwarding for the NVR web port (default 80) and the streaming port (default 9877) in the router/gateway for remote viewing. You can then type in <http://yourddnsdomain> in the browser to access the NVR remotely for live view.

English



DynDNS Free	Most Popular DynDNS Pro	DynDNS Custom
FREE	\$15 ⁹⁵ /yr	\$29 ⁹⁵ /yr
Get a free domain name	Up to 25 Pro domain names	DNS hosting for yourdomain.com
Update monthly to avoid expiration	Never expires, just works	Stands out with your own name
Use with Windows, OSX, routers & more	...also works with TSIG clients	...also works with Apple AirPort & Bonjour
Free email and community support	Access to phone technical support	Access to phone technical support
Sign Up	Sign Up	Sign Up

"Remote Desktop + DynDNS + private static IP - Win1" @irc9722

Fill in the necessary fields as illustrated below:

Add New Hostname

[↑ Host Services](#)

Note: You currently don't have any active [Dynamic DNS Pro](#) in your account. You cannot use some of our Host Service features. Paying for an Dynamic DNS Pro will make this form fully functional and will add several other features.

Hostname:

myddns

dyndns.org

Wildcard Status:

Disabled

[Want Wildcard support?](#)

Service Type:

☒ Host with IP address [?](#)
☐ WebHop Redirect [?](#)
☐ Offline Hostname [?](#)

IP Address:

60.250.139.170

Your current location's IP address is 60.250.139.170

TTL value is 60 seconds. [Edit TTL.](#)

Mail Routing:

☐ Yes, let me configure Email routing. [?](#)

What do you want to use this host for?

Select services and devices you would like to use with this hostname.

Work From Home Office or VPN:

vpn

remote file access

remote desktop

mail server

web server

chat server

ftp backup

ssh

database

voip

Hosting and Design For Web Sites and Blogs:

blog

gallery

wiki

portfolio

ecommerce

web page

Remote Access For Devices:

dvr

webcam

data storage

cctv

printer

alarm and security

thermostat

weather station

game server

home automation

Add To Cart

Enter a desired hostname here

Select a desired sub-domain from the drop-down menu

Click here to automatically fill in the current public IP in the "IP Address field"

Pick one or more options here (any is fine)

Click to go to the next step

The page will check whether the hostname you entered has been used by another user or not as soon as you click the "Add to Cart" button. If you see below message, simply enter a different and click "Add to Cart" again

Hostname:

myddns

dyndns.org

This hostname already exists. It may be in use by another customer.

Once you get to the next page, fill in the necessary fields as illustrated below

Shopping Cart

Host [seenergy88.dyndns.org](#) added to cart. **Finish FREE checkout to activate.**

Your cart contains **free services only**. You will not be asked for credit card information.

Upgrade Options

Free accounts allow only five Dynamic DNS hosts.

- To add more and enjoy [additional benefits](#) for only \$15.00 per year, [purchase Dynamic DNS Pro](#).
- To get Dynamic DNS for **your own domain**, use [Custom DNS](#).

Dynamic DNS Hosts

seenergy88.dyndns.org	-	remove	\$0.00
---------------------------------------	---	------------------------	--------

Have a coupon? [Log in.](#)

Sub-Total:	\$0.00
Order Total:	\$0.00

Create account or log in to continue

Create an username and a password here. This will be used in the NVR's configuration. Enter a valid email address as well.

Username:

Password:

Confirm password:

Email:

Confirm email:


Subscribe to:

☐ DynDNS.com newsletter (1 or 2 per month)

☐ Dyn Inc. press releases

☐ Remove HTML formatting from email

Security Image:



Enter the numbers from the above image:

☒ I agree with the [acceptable use policy \(AUP\)](#) and [privacy policy](#).

[Create Account](#)


Already Registered?

Username

Password

[Log in](#)

[Forgot your password?](#)



Enter the security code

Check to agree the license

Click to finish creating the account

English

50

Go back to the NVR's DDNS service configuration page under "Setup" >> "System Configuration" >> "DDNS Service".

Fill in the domain name you picked during the registration in the "Domain Name" field and the username/password you created in the "User ID" and "Password" field and click "Apply" to finish

NVR16CH Network Video Recorder

Dynamic DNS Service

☒ Enable DDNS Service

Server Address:

Domain Name:

User ID:

Password:

You can click the "Check DDNS Status" button to check the DynDNS service status. If you are getting a "Disconnected" message, it means that DDNS service server is down or the NVR is not connected to the Internet. If everything is ok normally, you should be prompted with a success message

NVR16CH Network Video Recorder

Dynamic DNS Service

☒ Enable DDNS Service

Server Address:


Domain Name:

User ID:

Password:

Connection Status: Disconnected

Message from webpage

 Connect DDNS successful

Notice the "Connection Status" displays the status of whether the NVR has been able to successfully update its current public IP address to the DynDNS server



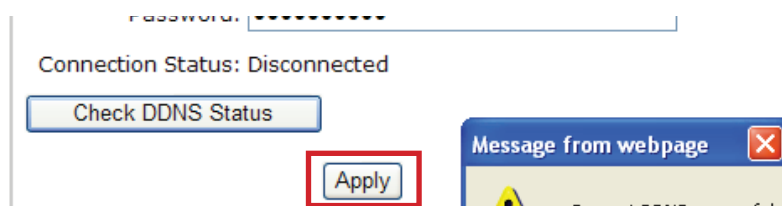
User ID: shiangshiang13

Password: ●●●●●●●●

Connection Status: Disconnected

Check DDNS Status

The NVR will automatically check with the DynDNS server once every hour and update its latest public IP to the server. The "Apply" button does the same thing which if you are see the "Disconnected" status, you can use it to manually check with the server without waiting for the NVR to update itself in the next hour. **However, it is advised not to do so too often as DynDNS disallow repetitive updates within a short period of time and the account will be banned if such action is detected.**



Password: ●●●●●●●●

Connection Status: Disconnected

Check DDNS Status

Apply

Message from webpage

Connect DDNS successful

3.1.3 Time and Date

The screenshot shows the 'Time and Date Setting' web interface. On the left is a navigation menu under the 'Setup' heading, with options: System Configuration (expanded), Network Setup, Time and Date (selected), Users Account, Group Privilege, Disk Setup, Channel Configuration, Event Configuration, Recording Configuration, and System Options. The main panel is titled 'Time and Date Setting'. It features a 'Time Zone' dropdown menu set to 'GMT+08 (Beijing, Hong Kong, Shanghai, Taipei)' and an unchecked 'Summer time' checkbox. Below this are two radio buttons: 'Manual' (selected) and 'Sync with NTP Server'. The 'Manual' section contains six dropdown menus for Year (2009), Month (05), date (06), Hour (10), Minute (24), and Second (29). The 'Sync with NTP Server' section has an 'NTP Server' text field containing 'ntp.ucsd.edu' and an 'Update Interval' dropdown menu set to '24 hr'. At the bottom, there is a radio button for 'Sync with PC' followed by the text 'May 06, 2009 10:24:29' and an 'Apply' button.

Set the time and date by selecting the time zone according to your location. It is imperative that you set the recorder's time correctly to avoid the following errors:

- Incorrect display time for playback videos
- Inconsistent display time of event logs and when they actually occur

After selecting the time zone, choose an option below to set the recorder time

- **Manual** – Use the drop-down list and configure the time manually
- **Sync with NTP server** – enter the hostname or IP address of a valid NTP server and set how often the recorder should synchronize the time with it by using the "Update interval" drop-down menu
- **Sync with PC** – Check this option to synchronize the recorder time with the PC that you are currently using to access the recorder

3.1.4 User Account

The recorder can be accessed by multiple users simultaneously. You can add, remove, and edit users by using options provided in this page to keep user information organized. Each recorder comes with a built-in "admin" account with password "admin". It's highly recommended to change the password upon your initial login.

User Name	Group	Description
admin	admin	
guest	guest	sc
joser	supervisor	eng
hunt	opera	tc
view1	VIEWER	japan

Add User

User Name: Only A-Z, a-z, 0-9 and _@ are allowed

Password:

Confirm Password:

Company: (Optional)

Department: (Optional)

Telephone: (Optional)

Mobile: (Optional)

E-Mail: (Optional)

Group:

Language: (Optional)

Description:

To change the password of the "admin" account:

1. Click and highlight the "admin" account in the account list and click "Edit"
2. Its information should be displayed in "User Account Information"
3. Enter a new password in the "Password" field and enter it again in "Confirm Password"

Username: admin

Group: admin

Description: This is the admin account

User Account Information

Username: admin

Password: *****

Confirm Password:

Company: (optional)

Department: (optional)

To add a new user:

- Enter a username and password in "User Account Information". All other fields are optional for your own reference.
- Select a group from the "Group" drop-down menu to assign the new user to a particular group
- Enter a short description for the account if you wish
- Click "Apply" to finish configuration

3.1.5 Group Privilege

Group Privilege is where you can create multiple customized access policies for situations if you need the recorder to be accessed by users other than the administrator. You can do so by creating a group, and then remove access privileges for certain configuration pages or cameras. Users that are created and assigned to this group will have limited access instead of full administration rights.

The recorder comes with seven built-in groups and five built-in privilege profiles, except the “admin” and the “guest” accounts; the other five groups are fully customizable or you can simply assign a group with one of the default privilege profiles. You can, however, assign more than one users to the “admin” account if you wish to do so. The guest account comes with a “view-only” privilege in the “Live View” page, and users in this group do not have the power to make any changes in the “Live View” page or have access to pages other than the “Live View” page.

To create a group, select a group from the “Group” drop-down

You can change the group name by clicking the “Change Group Name” button. A text box will be displayed for you to enter the new group

4 Channel (Basic) Network Video Recorder

Choose what type of privilege you would like this group to have from the "Privilege Type" drop-down menu

Group:

Privilege Type:

Its access privilege will then be displayed. You can alter its settings by allowing or denying access to other cameras using the checkboxes instead of accepting the defaults

Group Privilege Setting

Group:

Account Type:

Live:

<input type="checkbox"/> CH1	<input checked="" type="checkbox"/> CH2	<input checked="" type="checkbox"/> CH3	<input checked="" type="checkbox"/> CH4	<input checked="" type="checkbox"/> CH5	<input checked="" type="checkbox"/> CH6	<input checked="" type="checkbox"/> CH7	<input checked="" type="checkbox"/> CH8
<input checked="" type="checkbox"/> CH9	<input checked="" type="checkbox"/> CH10	<input checked="" type="checkbox"/> CH11	<input checked="" type="checkbox"/> CH12	<input checked="" type="checkbox"/> CH13	<input checked="" type="checkbox"/> CH14	<input checked="" type="checkbox"/> CH15	<input type="checkbox"/> CH16

Playback:

<input type="checkbox"/> CH1	<input checked="" type="checkbox"/> CH2	<input checked="" type="checkbox"/> CH3	<input checked="" type="checkbox"/> CH4	<input checked="" type="checkbox"/> CH5	<input checked="" type="checkbox"/> CH6	<input checked="" type="checkbox"/> CH7	<input checked="" type="checkbox"/> CH8
<input checked="" type="checkbox"/> CH9	<input checked="" type="checkbox"/> CH10	<input checked="" type="checkbox"/> CH11	<input checked="" type="checkbox"/> CH12	<input checked="" type="checkbox"/> CH13	<input checked="" type="checkbox"/> CH14	<input checked="" type="checkbox"/> CH15	<input type="checkbox"/> CH16

Allow use of PTZ:

<input type="checkbox"/> CH1	<input checked="" type="checkbox"/> CH2	<input checked="" type="checkbox"/> CH3	<input checked="" type="checkbox"/> CH4	<input checked="" type="checkbox"/> CH5	<input checked="" type="checkbox"/> CH6	<input checked="" type="checkbox"/> CH7	<input checked="" type="checkbox"/> CH8
<input checked="" type="checkbox"/> CH9	<input checked="" type="checkbox"/> CH10	<input checked="" type="checkbox"/> CH11	<input checked="" type="checkbox"/> CH12	<input checked="" type="checkbox"/> CH13	<input checked="" type="checkbox"/> CH14	<input checked="" type="checkbox"/> CH15	<input type="checkbox"/> CH16

System Configuration:

<input checked="" type="checkbox"/> System Configuration	<input checked="" type="checkbox"/> Channel Configuration	<input type="checkbox"/> Event Configuration
--	---	--

3.1.6 Disk Setup

Once you install a hard disk to the recorder, you would need to initialize it so that it can be ready for recording. You can obtain basic information about the disk you installed in this page

To initialize it, simply click the "Format" button

NVR Setup

[-] System Configuration

Network Setup

Time and Date

Users Account

Group Privilege

Disk Setup

[+] Channel Configuration

[+] Event Configuration

[+] Recording Configuration

[+] System Options

Hard Disk Setting

Disk ID	Disk Type	Capacity	Disk Status	Format
1	Internal	142GB	Online	<button>Format</button>

You can also connect external USB thumb drive to the recorder for firmware upgrade.



To obtain detail information about the disk, go to "System Options" >> "Disk Status"

3.2 Channel Configurations

3.2.1 Add a Camera

The NVR provides two options for adding a new camera. Users have the option to let the recorder automatically find the cameras or it is possible to enter camera's information and add it manually.

Setup

- System Configuration
- Channel Configuration
 - Channel Setting
 - OSD Setting
 - PTZ Setting
 - E-MAP Monitor
- Event Configuration
- Recording Configuration
- System Options

Channel Setting

Channel	Channel Name	Group	IP Address	Format	Resolution
1	cam1	Group1	192.168.101.21	MJPEG	4CIF

Remove
Edit

Click here to search camera:

* You may skip this step and add a new camera manually by entering camera's setting in the "Camera Information" section

Add New Channel:

Channel ID:

Channel Name:

Group:

IP Address:

User Name:

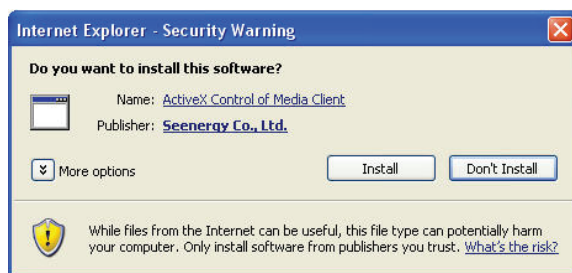
Password:

HTTP Port:

Once you fill out above information, click "Detect" to retrieve camera setting

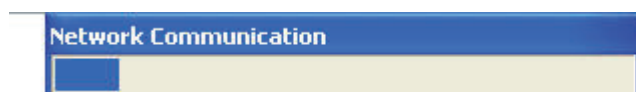
Automatic Search:

1. Click the "Search" button to perform the camera search. You should be prompted to install Active Control component in order for the search to function properly. Go ahead and click "Install"



4 Channel (Basic) Network Video Recorder

2. After that, the search should begin and its status should be displayed:



3. Found cameras should be listed and simply select a camera from the list and press "Configure"



4. Its corresponding information should be displayed in the "Camera Information" section. Enter its username and password and select the channel ID and name the camera.

 A screenshot of the 'Add New Channel' form. It contains several input fields: 'Channel ID' (set to 2), 'Channel Name' (BL-C10E), 'Group' (Group1), 'IP Address' (192.168.11.25), 'User Name' (admin1), 'Password' (masked with dots), and 'HTTP Port' (80). The 'User Name' and 'Password' fields are highlighted with a red rectangle.

Add New Channel:

Channel ID: 2

Channel Name: BL-C10E

Group: Group1 [Change Group Name](#)

IP Address: 192.168.11.25

User Name: admin1

Password: *****

HTTP Port: 80

5. Click on "Detect" to establish connection between the recorder and the camera. If connection establishes successfully, camera's detailed information should be polled and displayed as below

 A screenshot of the 'Additional Camera Information' form. It includes fields for 'Video Port' (554), 'Format' (MJPEG), 'Resolution' (840x480), 'Frame Rate' (Full), 'Quality' (2), and a 'Record' checkbox (checked, labeled 'Continuous'). There is a 'Preview' button and a small video preview window showing a camera feed.

Detect Once you fill out above information, click "Detect" to retrieve camera setting

Additional Camera Information

Video Port: 554

Format: MJPEG

Resolution: 840x480

Frame Rate: Full

Quality: 2

Record: ☒ Continuous

Preview

6. Adjust its video format, frame rate, resolution or bitrate...etc if you wish. You can also click on the "Preview" to preview the live video of the camera.

Click "Add" to finish adding the camera

4 Channel (Basic) Network Video Recorder



If cameras are marked with "*" in the search result, it means those cameras are already configured and connected to the NVR.

Add a new camera by manually entering camera's setting in the "Camera Information" manually, then follow step 5 ~6 described above.

	IP Address	HTTP Port	Installed
	192.168.101.40	80	
	192.168.101.42	80	
	192.168.101.41	80	
	192.168.101.47	80	
	192.168.101.43	80	
	192.168.101.23	80	*
	192.168.101.46	80	

Add a camera manually

Simply follow the instruction described above but instead of using the "Search" function, enter the camera's IP address and credential in the "Camera Information" manually, then follow step 5 ~6 described above.

Add New Channel:

2. Channel ID:

Channel Name:

Group:

IP Address: 1.

User Name:

Password:

HTTP Port:

Once you fill out above information, click "Detect" to retrieve camera setting

Enter manually

3.2.2 OSD Settings

The OSD (On Screen Display) allows users to add informational text message and embed it onto the video. By default, this function is turned off. To add texts to one or more videos,

1. Select a camera you would like to add text to and choose "Display OSD"



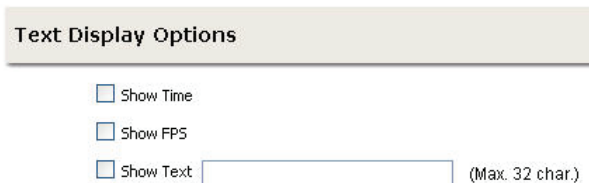
OSD Settings

Camera: Camera 1

☐ Do Not Display OSD

☒ Display OSD

2. Choose one or more display options if you would also like the recorder to automatically embed the system time or the frame rate for you. Or simply choose to display a custom message of your own



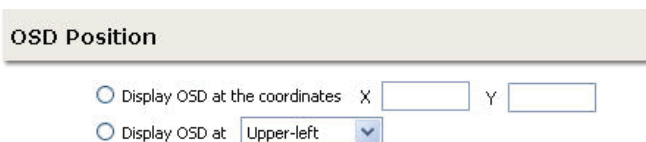
Text Display Options

☐ Show Time

☐ Show FPS

☒ Show Text (Max. 32 char.)

3. Next, define where the text will be displayed by either entering an X/Y coordinate or use the system pre-defined position from the drop-down menu



OSD Position

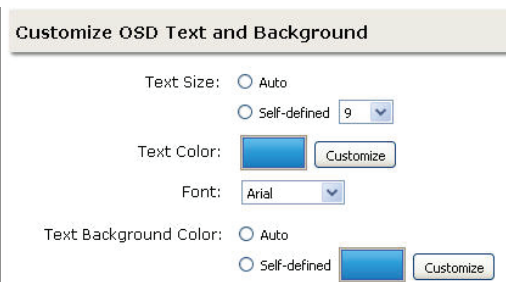
☐ Display OSD at the coordinates X Y

☐ Display OSD at Upper-left

4. Click on the "Preview" button to see the preview of your setting and click "Apply" to save the configuration



- The texts can be further adjusted with changes to different size, color or font so they can be more visible on the video



Customize OSD Text and Background

Text Size: ☐ Auto ☐ Self-defined 9

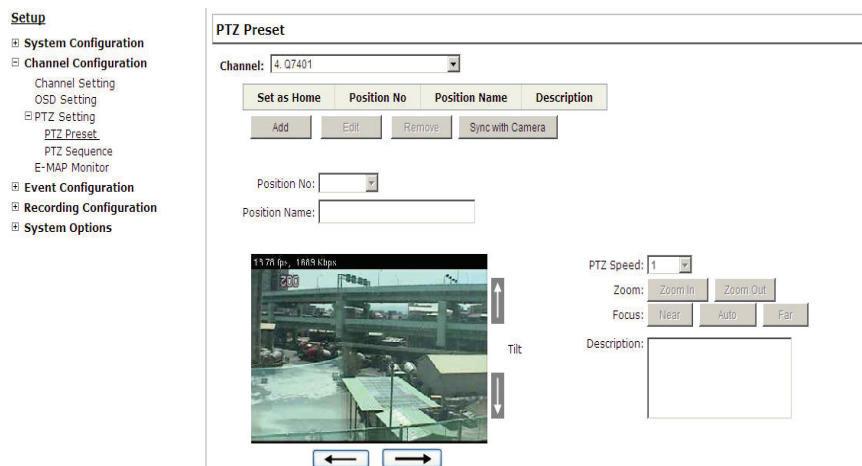
Text Color: Customize

Font: Arial

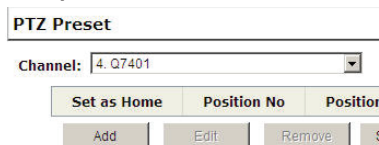
Text Background Color: ☐ Auto ☐ Self-defined Customize

3.2.3 PTZ Preset Settings

The recorder supports PTZ cameras and can set multiple preset points or retrieve and manage preset points that are set in the camera. This is helpful if you need to monitor multiple spots in one area from a particular camera.



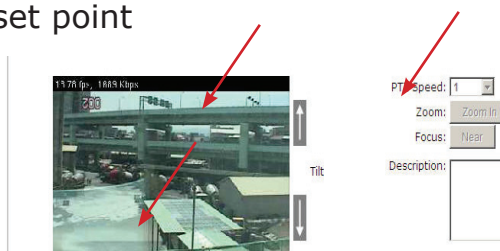
1. To set up PTZ preset points, select a camera from the "Camera" drop-down menu and click "Add"



2. Select a position number for the preset point from the "Position Number" drop-down menu and fill in a name in the "Position Name" field for easier identification



3. Use the PTZ control provided in the configuration page to set the preset point



Ultimately, you can choose to make this preset point a “Home” point among all other preset points, as well as making the camera to move to this particular point when an event is triggered.

Setup

- System Configuration
- Channel Configuration
 - Channel Setting
 - OSD Setting
 - PTZ Setting
 - PTZ Preset**
 - PTZ Sequence
 - F-MAP Monitor

PTZ Preset

Channel: 4_Q7401

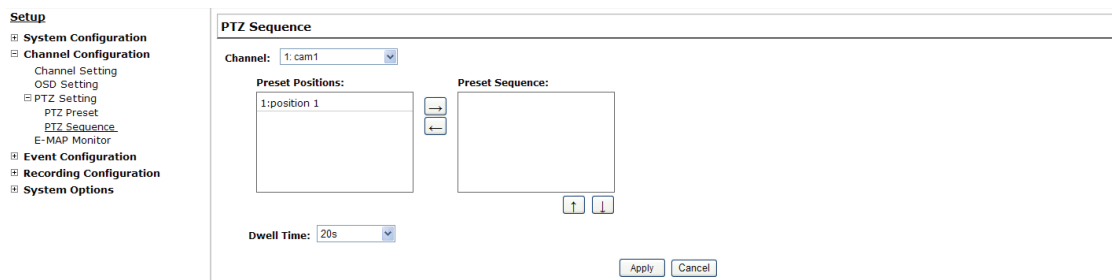
Set as Home	Position No	Position Name	Description
-------------	-------------	---------------	-------------

Add Edit Remove Sync with Camera

- *“Move Here when Event Trigger”: In order for this function to work properly, please also complete configuration in “Event Configuration” >> “Event Trigger”*

3.2.4 PTZ Preset Sequence

Once you have multiple preset points defined for a camera, it is convenient for monitoring to set up the sequencing viewing among those preset point and let the recorder automatically switch between them for you.



To configure preset sequence for a camera, select a channel from the “Channel” drop-down menu

The available preset points should be listed in “Camera Presets” section

Pick the ones you like for sequence viewing and press the “->” button to move them to the “Preset Sequence” section, then use the up and down buttons to adjust their sequencing positions.

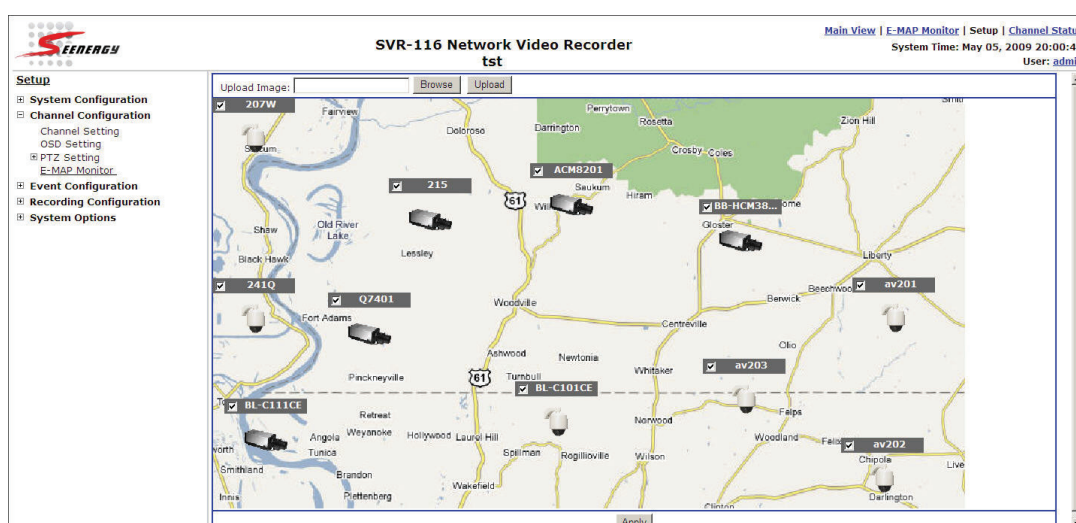
Finally, select a dwell time from the drop-down menu and click “Apply” to save the configuration

- To start preset sequence viewing, check page 16 for instructions

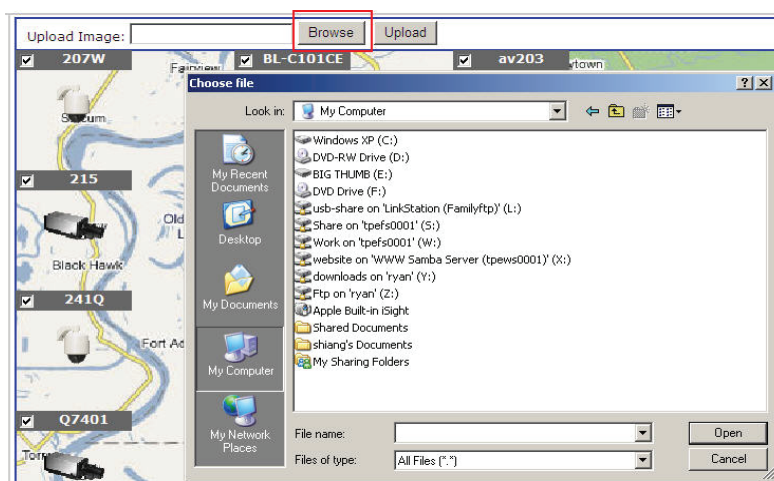
3.2.5 E-Map Monitor

3.2.5.1 Local Map Setting

E-Map monitor is a function that alerts users whenever there is an event triggered (e.g. motion detected) from a camera with a geographical perspective. With this function, users can quickly identify which camera has detected an unusual event and where this event is happening. This function works by incorporating the event detection function as well as the recording function, which, as a result, helps users take all the necessary actions when an unusual event occurs.

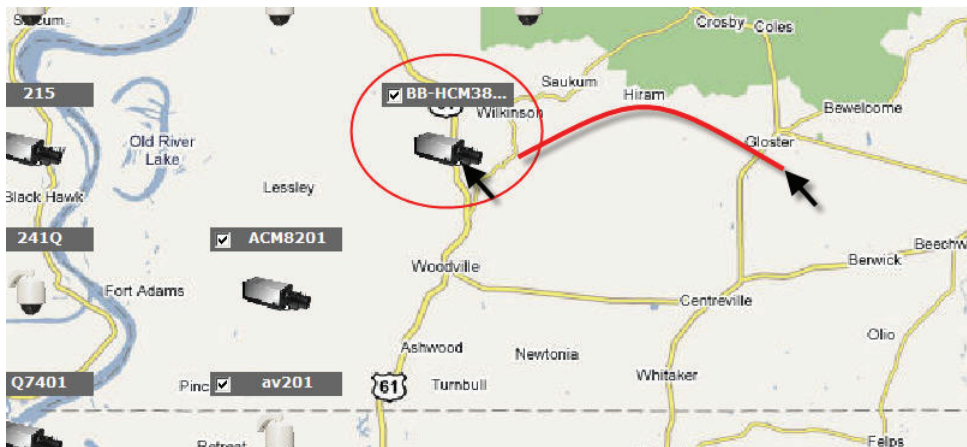


To replace the map, click "Browse" button to locate the new map image file from the local PC and then click "Upload"



- Only JPG, PNG, and GIF file formats are supported with file size under 100KB

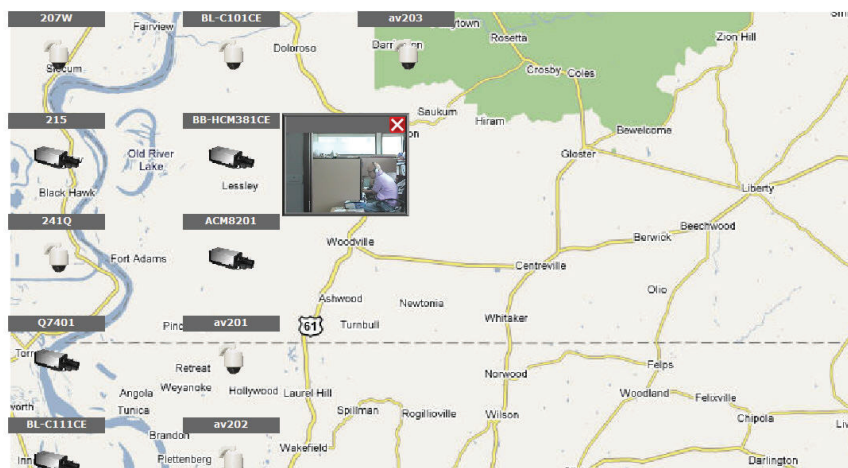
Then click and drag the camera icon to move the camera to define its location.



Access the E-Map Monitor page from the upper-right hand corner menu

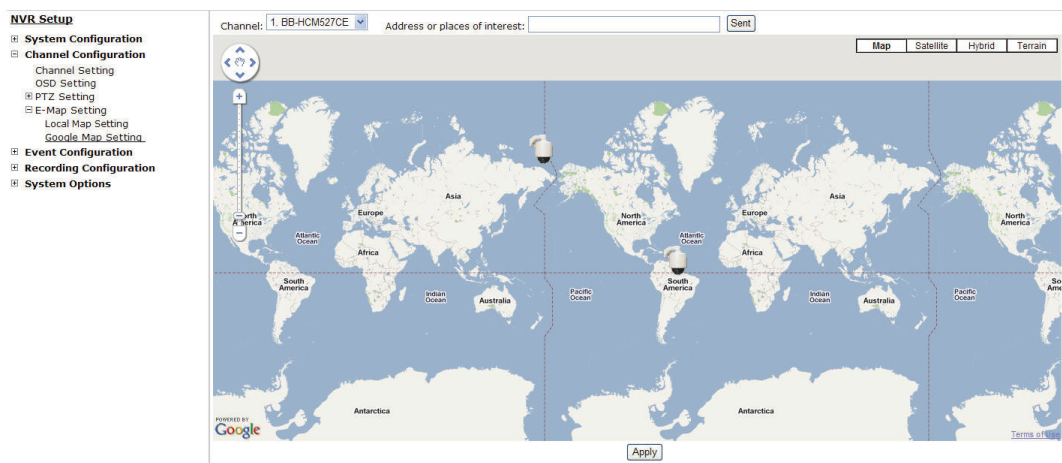


When the NVR receives an event triggered from any of the cameras, their videos will be displayed on the E-Map and you can double-click on the video to enlarge it



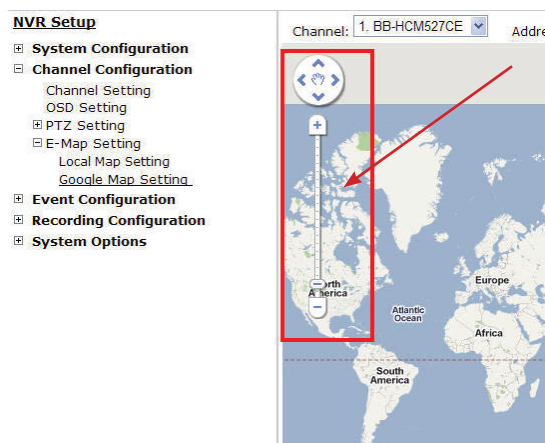
3.2.5.2 Google Map Setting

The Google Map monitor is a similar function to the aforementioned E-Map monitor. It is useful if you are managing multiple cameras from different locations.

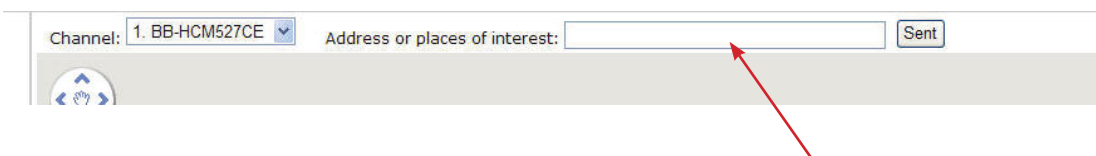


To configure locations of each camera, first determine the location you'd like to place the camera to on the map. You can do so by:

1. Zoom in to a smaller area by using the zoom control bar on the map
2. Zoom in to a smaller area by using the mouse scroll button



You can also go to a specific place on the map by entering its address or the name of the place in the "Address or places of interest" field:



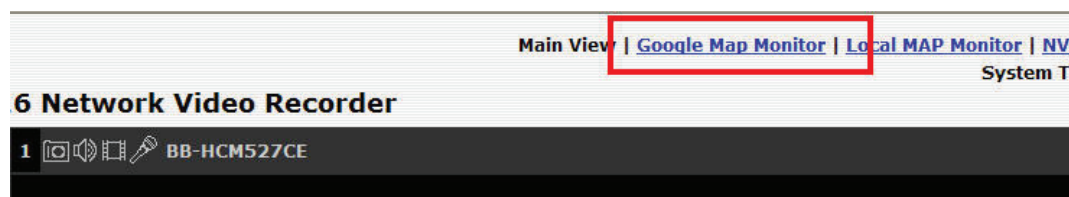
Once the location has been determined, click and drag the camera icon to move it to the desired location:



** Click and drag the icon to re-arrange its location*

- The Google Map Monitor requires active Internet connection and can not be used in conjunction with the regular E-Map monitor function.
- You can click anywhere on the map and hold down the mouse left button then drag to move the map itself

You can then access the Google Map Monitor from the top menu:



3.3 Event Configurations

The “Event Configurations” section allows users to define conditions that constitute an event, its corresponding trigger action and when it will be triggered. Such setting can reduce the management overhead and notify the administrator only when it's necessary.

3.3.1 General Settings

The general settings section can help you quickly configure when an event is triggered, how often events are triggered and the corresponding actions when events are triggered.

Start the event configuration by defining the general settings:

Define when an event will be triggered

- Choose “Always” or “Only during...” under “Event Trigger Duration”
- For the “Only during...” option, choose the days by using the checkbox and then define the time range in those days in the “Start Time” and “End Time” fields that you would like the event trigger function to be enabled.

How often an event is triggered

- Set a time interval under “Event Trigger Interval” to define how often events are triggered

Trigger action

Now that you have the event trigger duration and interval defined, choose what action to be taken during an event trigger:

- You can choose to have the recorder send out the first few frames of the video recorder upon an event is triggered
- You can also choose to have the recorder send out a warning message in e-mail or in txt file format and upload it to an destined FTP server

** The image(s) that are uploaded to the destined FTP server or emailed to a destined mail recipient are in their own proprietary image file format (.h4i or .p4i), which can only be opened by the NVR media player. For details, please refer to page34.*

3.3.2 Event Servers

Event servers are to be used with event trigger actions. In case of unusual motion detected by the camera or a disk failure, the recorder can send notification with the acceptable format (image/txt) to a destined event server according to the configuration.

Configuring an FTP server

NVR Setup

- System Configuration
- Channel Configuration
- Event Configuration
 - General Setting
 - DI/DO Setting
 - Event Servers
 - FTP Servers**
 - HTTP Servers
 - SMTP Servers
 - Event Trigger
- Recording Configuration
- System Options

FTP Servers Setting

Name	Network Address	Port	Passive Mode	Enabled
<input type="button" value="Edit"/>	<input type="button" value="Remove"/>			

FTP Server
Name:
Network Address: *Enter host name or IP address
Port:

Login Information
User Name:
Password:

Passive Mode
☐ Use Passive Mode

Test
 *Click "Test" to test the connection to the FTP server:

To add an FTP server,

1. Start by giving a name to the server that you are adding to the recorder
2. Enter the hostname or the IP address of the FTP server
3. Enter the communication port of the FTP server (usually port 21)

FTP Server

Name:

Network Address: * Enter host name or IP address

Port:

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4. Enter the username and password of the FTP server if it's required
5. Check "Use Passive Mode" if it's required or leave it unchecked to use active mode

Login Information

Username:

Password:


Passive Mode

☐ Use Passive Mode

6. Click "Test" to verify if all information is entered correctly and the connection to the FTP server can be established successfully
7. Click "Add" for the settings to take effect

Test

*Click "Test" to test the connection to the FTP server:

 If you wish to edit/remove/enable/disable an FTP server, click to highlight one from the profile list and choose the corresponding action button/checkbox

Name	Network Address	Port	Passive Mode	Enabled
test	ftp.test.com	21	No	<input checked="" type="checkbox"/>
<input type="button" value="Edit"/>		<input type="button" value="Remove"/>		

Configuring an SMTP server

The screenshot shows the 'SMTP Servers Settings' page. On the left is a navigation menu with categories: SETUP, System Configurations, Camera Configurations, Event Configurations, Recording Configurations, and System Options. Under 'Event Configurations', 'SMTP Servers' is selected. The main area is titled 'SMTP Servers Settings' and contains two sections: 'SMTP Server 1' and 'SMTP Server 2'. Each section has fields for 'Network Address', 'Port', 'Sender's Name', and 'Sender's E-Mail'. Below these is a checkbox for 'Enable Authentication'. If checked, there are fields for 'Username' and 'Password'. A 'Test' section with a 'Send' button is also present.

SMTP Servers Settings

SMTP Server 1

Network Address:

Port:

Sender's Name:

Sender's E-Mail:

☐ Enable Authentication

Username:

Password:

Test

Send test email to:

SMTP Server 2

Network Address:

Port:

Sender's Name:

Sender's E-Mail:

☐ Enable Authentication

Username:

Password:

1. Enter the hostname or the IP address of the SMTP server
2. Enter the port of the SMTP server
3. Specify the sender's name in the "Sender's name" field
4. Enter the sender's e-mail address
5. Check "Enable Authentication" and enter the username and password of the SMTP server and as it requires authentication
6. Click "Apply" to save the configuration

3.3.3 Event Triggers

We have finished defining how an event will be triggered and which servers will be receiving notifications in the previous two sections, now we can finish up the event configuration by setting:

- which channels will have event trigger function enabled
- What is considered to be an event
- Where the warnings will be sent to and how they will be sent

SVR-116 Network Video Recorder
SEEnergy_SVR116

English
Main Live | Setup | Camera Status
System Time: October/07/2008 16:33:53

Event Handling Settings

When Cameras is Triggered by

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

When SVR-116 is Triggered by

☒ Recycled ☒ When SVR-116 shuts down

☒ Disk Full ☒ When SVR-116 Configuration Changed

☒ Disk fail ☒ Camera's Configuration Changed

☒ When SVR-116 starts up

Trigger Actions

☐ E-Mail: E-Mail Addresses: *use , to separate e-mails

☐ FTP Upload Path:

☐ HTTP

☒ Trigger Output

☒ Buzzer

Apply

Select Channels to Enable Event Trigger and which type of event should be triggered

- Use the checkbox to enable event trigger on the desired channels

Event Handling Settings

When Cameras is Triggered by

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Once motion detection is enabled in this page, please configure the motion area and enable motion detection in the corresponding channels (cameras). The NVR only detects the first motion area set in the camera. The NVR recognizes the first motion area by its ID number set in the camera.

- Define which system events should trigger the recorder to send out notifications

When SVR-116 is Triggered by

- | | |
|---|---|
| <input type="checkbox"/> Recycle | <input type="checkbox"/> When SVR-116 Shuts down |
| <input type="checkbox"/> Disk Full | <input type="checkbox"/> When SVR-116 Configuration Changed |
| <input type="checkbox"/> Disk Fail | <input type="checkbox"/> Camera Configuration Changed |
| <input type="checkbox"/> When SVR-116 Starts up | |

- Define how the notifications will be sent and where they will be sent to

Trigger Actions

- | | | | |
|--------------------------|---------------------------|--|-------------------------------|
| <input type="checkbox"/> | E-Mail: | E-Mail Addresses: <input type="text"/> | *use ", " to separate e-mails |
| <input type="checkbox"/> | FTP | Upload Path: <input type="text"/> | |
| <input type="checkbox"/> | HTTP | | |
| <input type="checkbox"/> | Trigger I/O Output | | |

** Event trigger may not work for cameras that are placed outside of your local network or on the Internet until the "UPnP Port Forwarding" is enabled in both the NVR and the router.*

3.4 Recording Configurations

The "recording configurations" gives users the overall control of how and when a recording is performed and the quality of different types of recordings performed on each channels. It can help the recorder to operate with sufficient system resource by performing recording only when it's necessary with adjustable recording frame rate.

You can define the following in "General Settings":

- Pre-Alarm/Post-Alarm recording length
- Recording frame rate
- Enable/disable different recording types on different cameras
- Enable/disable audio recording

The screenshot displays the web interface of the SVR-116 Network Video Recorder. The page title is "SVR-116 Network Video Recorder SEEnergy_SVR". The user is logged in as "admin" and the system time is "October 28, 2008 13:03:28". The interface is in English.

Setup

- System Configurations
- Channel Configurations
- Event Configurations
- Recording Configurations
 - General Settings (selected)
 - Schedule Settings
- System Options

Recording General Setting

Recording Buffer

Pre-alarm Buffer: 0 sec
Post-alarm Buffer: 5 sec

Recording Frame Rate

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Continuous	1	1 Only	1	1 Only	1											
Schedule	5	1 Only	5	1 Only	5											
Event	Full	Full	Full	Full	Full											
Manual	Full	Full	Full	Full	Full											

Recycling

☒ Enable Recycle

Camera Recording Setting

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Continuous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
Schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
Event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											

Apply Cancel

The "recording buffer" allows user to define "pre-alarm" and "post-alarm" time for event recordings. The "pre-alarm" time sets the NVR to record in advance when an event is triggered. The "post-alarm" time sets the NVR to continue recording for a period of time after an event trigger is finished.

Recording Buffer

Pre-alarm Buffer: sec

Post-alarm Buffer: sec

* The "Pre-alarm" function only works when the "Continuous" recording is also activated.

Recording frame rate allows you to set different frame rate for different types of recording instead of recording at one frame rate only. Use the drop-down menu and select one of the pre-defined frame rates for a particular recording type

Recording Frame Rate

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Continuous	1	I Only	1	I Only	1											
Schedule	5	I Only	5	I Only	5											
Event	Full	Full	Full	Full	Full											
Manual	Full	Full	Full	Full	Full											

Users can also set to keep a previous number of days of recording data by enabling the option below. This is quite often used in application such as banking which certain countries requires to always keep a minimum previous number of days of recording data.

Keep Video

☐ Keep the previous days of recorded videos

* If this option is enabled, once the hard drive is full, the recycle function will then start but it will ensure that the number of days of recording data defined here will stay in hard drive instead of wiping out 20GB of data at a time.

* If the hard drive is not full, the NVR re-calculates twice a day (each at 2:30am and 2:30pm) to keep the defined number of days of recording data from these two particular point of time backward.

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The "Camera Recording Setting" section allows you to turn on or off a particular recording type on any channels.

Camera Recording Setting

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Continuous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
Schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
Event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											

The section at the bottom of the page allows you to disable audio recording (record video only) of particular channels.

Record Audio

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Record audio	<input type="checkbox"/>															

3.4.2 Schedule Recording

Here you can define the time range of the schedule recording for all channels.

To configure a schedule recording:

1. Use the "Channel" drop-down menu and select a camera first

Channel:

2. You can use the schedule table to set the time range. Click the cell boxes then move horizontally lets you set what hours to perform recording during a day. Click and move vertically lets you set what days to perform recording at a specific time.

Schedule Table																								
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sunday																								
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								

Clear

* Each cell box represents 15 minutes of time. Click one or more boxes to omit consecutive recording

3. You can also use the “Quick Configuration” to define recording time range instead of clicking cell boxes one by one on the time table. Simply check what days you would like to perform recording and specify the recording duration by either choosing “All Day” or enter a start and end time for specific recording duration.

Quick Configuration

Days

☐ Mon. ☐ Tue. ☐ Wed. ☐ Thur. ☐ Fri. ☐ Sat. ☐ Sun.

Duration

☐ All day

☐ During Start Time: End Time:

4. Select the “Copy to” option if you would like to set the same recording schedule to another camera.

☒ During Start Time: : End Time:

Copy Schedule To Channel:

3.5 System Options

System Options gives users a glance of the overall system status and allows users to perform maintenance tasks such as upgrading firmware, restore/backup device settings or reboot deviceetc.

3.5.1 Device Information

The "Device Information" provides the general information of the device such as firmware version and system time. It also provides information of the current network settings and status.

Setup

- System Configuration
- Channel Configuration
- Event Configuration
- Recording Configuration
- System Options

Device Information

System Logs
Maintenance
DO Status
Disk Status

General Information

Device Name: tst
Model Name: SVR-116
Firmware Version: 1.2.0.30014714
Device Time: Up 0 days 16:56:55, since May 05 2009 18:56:23

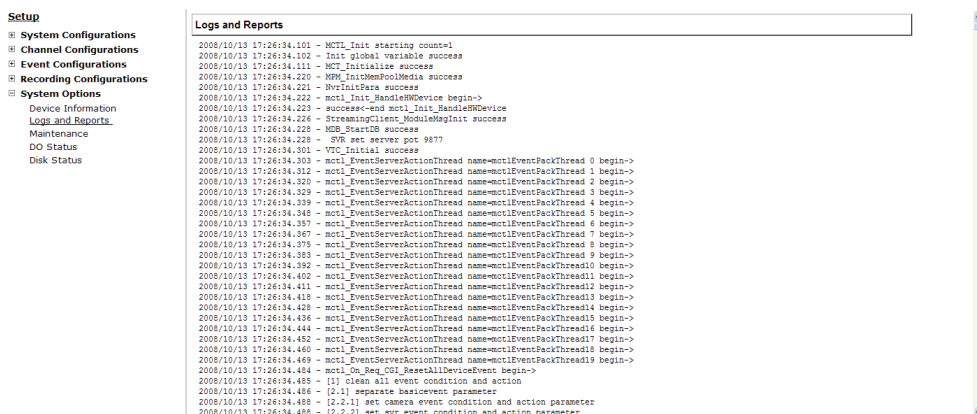
Network Information

Network Type: DHCP
Device IP: 192.168.102.2
HTTP Port: 80
Streaming Port: 9877
MAC Address: 00:28:68:78:31:03
DHCP Server: Disabled
UPnP Port Forwarding: Disabled

Current DHCP Clients

3.5.2 Logs and Reports

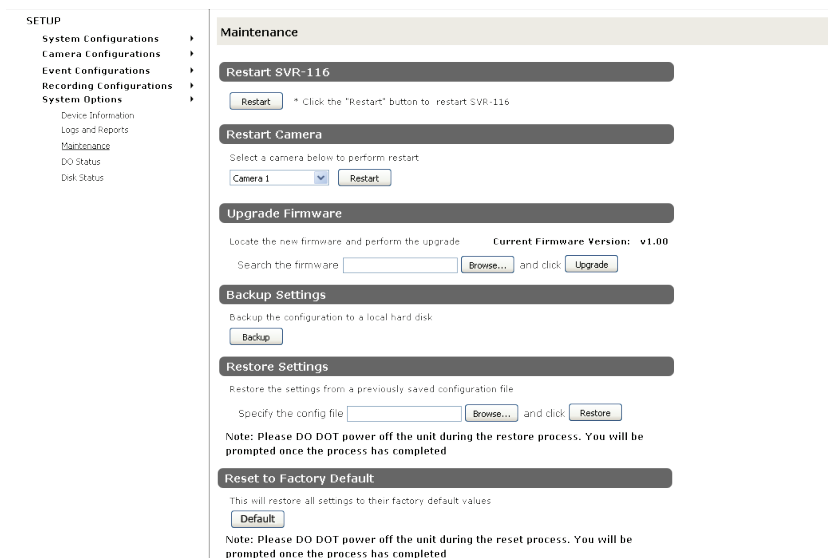
“Logs and Reports” keeps a record of what’s been happening to the device and provides basic information for troubleshooting



3.5.3 Maintenance

“Maintenance” provides functions for users to:

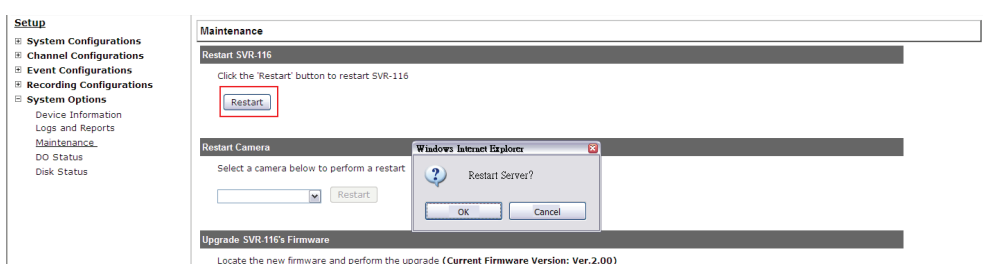
- Reboot the NVR when necessary
- Reboot cameras directly from the NVR
- Perform Firmware Upgrade
- Backup the NVR’s settings to a local hard drive
- Restore the NVR’s settings from a previously saved configuration file
- Reset the NVR’s settings to their factory default values



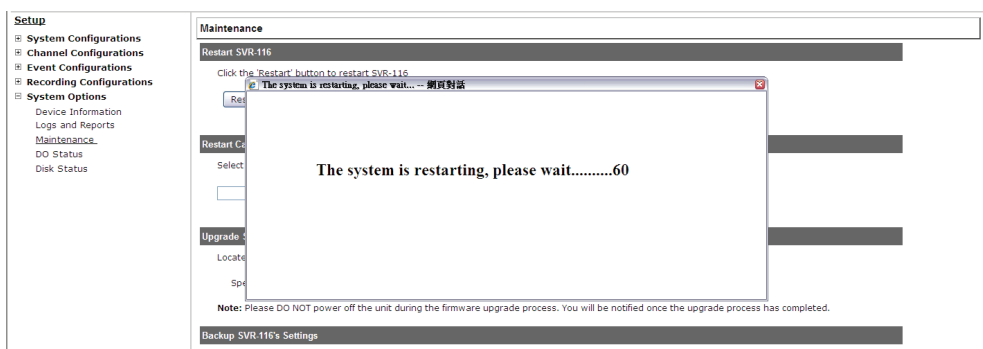
Reboot the NVR

Reboot the NVR after you upload a new firmware. You would need to manually reboot the system for the new firmware to take effect. Such process would prevent a recording from getting interrupted because the system would not automatically reboot itself after the new firmware is loaded onto the recorder.

Simply click "Restart" to begin the reboot process and confirm the action:



The restart process should be displayed and you should be prompted back to the "Maintenance" page after it is complete:



Firmware Upgrade

The firmware can be upgraded through web UI or USB. Before upgrading firmware, please backup configuration in advance.

**** the firmware file comes with a ".tar.gz" file extension, please use the file as is, DO NOT unzip it. It's normal that you may only see ".tar" as the file extension in Windows as the OS hide the known file extension by default.**

A. Upgrade through Web UI

1. Login into NVR's web management UI. Go to "Setup" page and go to "System Options"->"Maintenance"

+ **Recording Configuration**

- **System Options**

Device Information

System Logs

Maintenance

DO Status

Disk Status

2. On "Upgrade NVR's Firmware" section, click "Browse" and select new firmware file

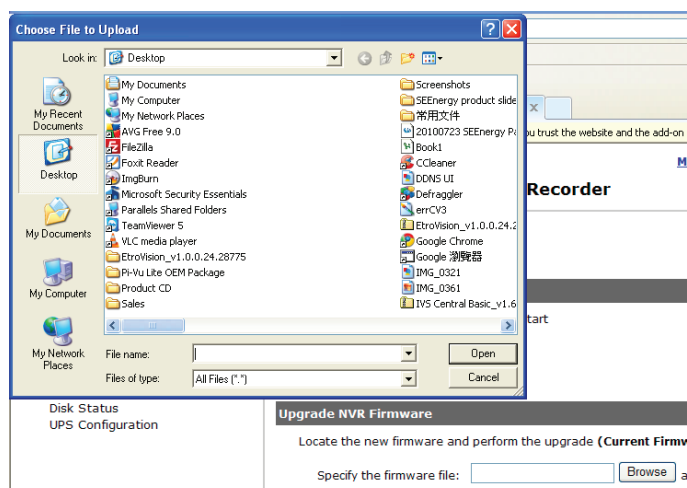
Upgrade NVR Firmware

Locate the new firmware and perform the upgrade (**Current Firmware Version: 1.5**)

Specify the firmware file: and click

***** Note ***:** Please DO NOT power off the system during the firmware upgrade p

3. A new dialog should display and let you choose the location of the firmware file



4. When done, click "Upgrade"



5. Follow the on screen instruction and wait for the process to finish (After upgrade, the system will reboot automatically, it's part of the process)

B. Upgrade through USB

1. Prepare a USB flash disk and format with FAT or FAT32 format
2. Place the firmware in the USB flash disk and make sure it's placed at the top-level directory. Please do not place the file in a folder. **(make sure to change the firmware file name to "firmware" and leave its file extension ".tar.gz" as is before placing the file to the USB disk)**
3. Plug USB flash disk into USB port on the NVR
4. The Status LED on the NVR will start to flash in amber. This indicates firmware upgrade is in process
5. *** Warning *** Please wait until upgrade process finished, interrupt the upgrade process may cause system not work anymore
6. Wait until Status LED flashes in green. This indicates firmware upgrade is finished
7. Power off the NVR and remove the USB disk the power the unit back on again
8. Restore configuration file back if needed

Reset the NVR to Factory Default

To reset the recorder back to its factory default, click "Default" button and begin the process:

The screenshot shows the 'Maintenance' menu in the NVR's web interface. The left sidebar lists various setup options, with 'Maintenance' selected. The main content area contains several sections: 'Restart SVR-116' with a 'Restart' button and a note; 'Restart Camera' with a dropdown menu and a 'Restart' button; 'Upgrade Firmware' with a text input, 'Browse...' button, and 'Upgrade' button; 'Backup Settings' with a 'Backup' button; 'Restore Settings' with a text input, 'Browse...' button, and 'Restore' button; and 'Reset to Factory Default' with a 'Default' button. A note below the 'Reset to Factory Default' section states: 'This will restore all settings to their factory default values. Note: Please DO NOT power off the unit during the reset process. You will be prompted once the process has completed.'

The process should be displayed and you should be prompted back to the "Live View" page after it is complete:

The screenshot shows a dialog box titled 'The system is resetting to its factory default settings, please wait...' with a progress bar and a 'Back' button. The background shows the 'Upgrade SVR-116's Firmware' section of the maintenance menu, which is partially obscured by the dialog box. The dialog box also contains a note: 'Note: The system is resetting to its factory default settings, please wait.....60'.

3.5.4 Disk Status

“Disk Status” gives you a more detailed information of the hard drive that is currently installed in the NVR.

Setup

- System Configuration
- Channel Configuration
- Event Configuration
- Recording Configuration
- System Options
 - Device Information
 - System Logs
 - Maintenance
 - DD Status
 - Disk Status

Disk Status

Disk ID	Status	Capacity	Remaining Disk Space	Remaining	Online Time	Recording Period	Est. Remaining Time
1	Offline	500GB	0GB	0%	--	--	--
2	Online	160MB	0MB	0%	May 05 2009 18:56:23		--

4 Channel (Basic) Network Video Recorder

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